

Monthly Labor Review

UNITED STATES DEPARTMENT OF LABOR • BUREAU OF LABOR STATISTICS

LAWRENCE R. KLEIN, *Chief, Publications Staff*

CONTENTS

Special Articles

- 277 State Labor Legislation in 1947
- 285 Great Britain: Wage Trends and Wage Policies, 1938-47
- 293 Job Prospects in Plastics Products Industry
- 302 Working Conditions of Public-Health Nurses

Summaries of Special Reports

- 304 Prices in the Second Quarter of 1947
- 314 Wages in Women's Blouse and Waist Industry, January 1947
- 317 Wages in Machinery Industries, October 1946
- 320 Wages in Radio Manufacture, January 1947
- 321 President's Midyear Economic Report to Congress
- 325 Revised Estimates of National Income and Products
- 329 Survey of Consumer Finances
- 331 Paid Vacations and Sick Leave in Industry, 1945-46
- 335 Work Stoppages, First Quarter of 1947
- 336 Italy: Efforts To Create Employment
- 337 Japan: Labor Aspects of the Economic Emergency Program
- 340 Norway: Adjustment of Labor Problems
- 344 Legislation Affecting Postal Workers
- 344 Labor-Management Disputes in August 1947

Departments

- 275 The Labor Month in Review
 - 346 Recent Decisions of Interest to Labor
 - 350 Publications of Labor Interest
 - 357 Current Labor Statistics
-

September 1947 • Vol. 65 • No. 3

This Issue in Brief...

STATE LABOR LEGISLATION IN 1947 (p. 277) presents an analogue to the discussions of the Federal Labor Management Relations and the Portal to Portal Acts of 1947 carried in the July and August issues. During the current year, 44 State Legislatures met in regular session and several States held special sessions. Nearly all States passed some form of labor legislation. Thirty enacted legislation restricting or regulating labor unions; 14 passed laws prohibiting the closed shop. Progress was made in the field of workmen's compensation legislation with six States enacting new occupational-disease laws and many increasing the amounts of benefits.

The current stresses and strains which are besetting the British economy make especially appropriate the article GREAT BRITAIN: WAGE TRENDS AND WAGE POLICIES, 1938-1947 (p. 285), the third in a series of articles on wage trends in foreign countries, which began in the July issue. Compared to France, British wages and prices have been stable during both the war and postwar years. But, as in France, there was a tendency for the differentials between men's and women's wages to narrow. This held also for British skilled and unskilled workers and for some historic differentials between industries. Despite relative wage-price stability, however, it is felt that the relationship is delicately balanced and that a disturbance of the balance, resulting in upward movements of these factors, might further impair Great Britain's ability to export enough to cover requisite imports.

Some indicators of our own national well being are contained in the following three reports: SURVEY OF CONSUMER FINANCES (p. 329) taken from a larger report by the Federal Reserve Board

indicates, among other items, the intended and actual purchases of different types of goods by consumers at various income levels; REVISED ESTIMATES OF NATIONAL INCOME AND PRODUCTS (p. 325), an excerpt from a Department of Commerce publication, shows that the national income for the first half of 1947 was at an annual rate of almost 200 billion dollars; finally, a summary of the PRESIDENT'S MIDYEAR ECONOMIC REPORT TO CONGRESS (p. 321) warns that there are many "temporary props" to the high level of our current economy.

A less obvious sign of economic strength makes possible the article PAID VACATIONS AND SICK LEAVE IN INDUSTRY, 1945-46 (p. 331). Paid vacations and sick leave are more prevalent for office than for plant workers. About 3 out of 4 manufacturing establishments had formal paid vacation plans for plant workers and almost 9 out of 10 for office workers, after a year's service.

Vacations with pay are a common practice in WORKING CONDITIONS OF PUBLIC-HEALTH NURSES (p. 302). There are about 20,000 persons engaged in this profession in the country. In October 1946 they earned, on the average, \$184 a month; about 25 percent earned at least \$50 a week. Most nurses' work schedules did not exceed an 8-hour day or 40-hour week. Practically all public-health nurses could expect paid vacations and sick leave. About 40 percent were covered by some type of pension or retirement plan. The public-health nurses themselves, while expressing less dissatisfaction with their work than other types of nurses, did complain about limited opportunities for promotion, rates and methods of awarding increases in pay, and lack of security against unemployment.

Another field of work is discussed in JOBS AND JOB PROSPECTS IN THE PLASTICS PRODUCTS INDUSTRY (p. 293). The plastics industry, while growing, is still relatively small and opportunities in it, currently, are limited. Earnings, however, compare favorably with other manufacturing industries. Most employees in the industry are young and about a third of the workers are women. Over 25 percent of the jobs are molding occupations. Earnings range from entrance rates of 50 to 60 cents to skilled rates of more than \$2 an hour. A prevalent wage system involves incentive pay on a guaranteed hourly rate.

The Labor Month in Review

CONCERN OVER PROVISIONS of the Labor-Management Relations Act dominated industrial relations during July and August 1947. The problem of wage increases which had received such prominence in the spring was overshadowed, at least temporarily. Contributing to this situation was the fact that comparatively few important agreements were subject to reopening at this time.

Although the Labor-Management Relations Act was enacted June 23, important provisions, such as restrictions on the union shop, did not become effective until August 22. During this 60-day interval, a considerable number of agreements which continued union and preferential shop conditions were signed. A notable example was the Ford Motor Co. agreement with the United Automobile Workers, CIO. In an effort to maintain the closed shop which has prevailed for decades in many parts of the printing industry, the International Typographical Union at its 89th annual convention in August decided to refuse to sign new contracts with employers but merely to post the conditions under which their employees would work.

Efforts by unions to incorporate into agreements provisions which might protect them against possible extensive damage suits by employers were largely successful. Following the example of the United Mine Workers, unions in the auto, farm equipment, building service, and other industries won agreements of varied wording which had the effect of eliminating the danger of damage suits in the event of strikes not authorized by the unions.

Except for the 2-month-long strike in Eastern shipyards and a 28-day strike at the Murray Corp. (auto body producers for Ford and Studebaker) work stoppages in July and August were not sig-

nificant (see p. 344). The industrial relations picture remained clouded, however, because of uncertainties with respect to the application of the new law. One problem was the provision that no petition or change by a union could be entertained by the National Labor Relations Board unless the union and any national or international labor organization of which it is an affiliate filed detailed organizational and financial statements. Another problem was the requirement of an affidavit of each officer that he is not affiliated with the Communist party and does not believe in or advocate the overthrow of the Government by force. On August 22, the General Counsel of the National Labor Relations Board ruled that unless the unions complied with this provision any pending cases as well as new ones would be dismissed. An estimated 3,000 cases are involved. The General Counsel also ruled that the officers of the AFL and CIO as well as the national and local unions must file the anti-Communist affidavits. At the end of August only a few national unions had complied with the regulations.

Earnings Rise Slows Down

Hourly earnings of factory workers continued upward between June and July, but the rise was only 0.7 cent (preliminary estimate) as compared with 1.9 cents between May and June and 2.2 cents between April and May. These earlier increases reflected mainly the advances in such industries as steel, automobiles, and electrical equipment. The relatively small and uneven advances in most of the other factory industries indicate a slow and limited extension of the so-called "second round" of wage increases. Important recent wage adjustments in manufacturing included meat packing and leather. Among nonmanufacturing industries, the non-operating employees of the class I railways have been granted, by an arbitration board, an increase of 15½ cents per hour, effective September 1.

Employment Continues High

The employment situation continued, as in recent months, to show little change. The total number of civilian employees remained at approximately 60 million for the third straight month. Agricultural employment dropped about 600,000, continuing the seasonal decline from the

June peak; this decline was largely offset by an increase of more than 400,000 in nonagricultural jobs to a new high of 50.4 million. Almost all of the August rise occurred among adult workers, in contrast to the rise in teen-age job holders earlier in the summer. The increase appears to have reflected stepped-up activity in many manufacturing lines with the approach of the fall season. The number of persons on vacation dropped sharply from early July but was more than a half million higher than in August 1946. Civilian employment in August was 2,224,000 larger than a year earlier. This rise corresponds closely to the increase of 2,285,000 in the civilian labor force during the year, resulting largely from reductions in the armed forces and an increase in the number of veterans in the labor market. Unemployment dropped almost 500,000 to 2,100,000—only slightly above the year's low mark of last May. A large part of the decline occurred among teen-age youth, many of whom, unable to find or retain vacation-time jobs, had dropped out of the labor market by August. Unemployment among adult workers also dropped by over 200,000. This reduction, and the rise in nonagricultural employment, reflected increased hiring and call-backs in such industries as apparel, textiles, and leather, as well as in some of the durable-goods manufacturing industries.

Housing Starts at Peak

The general outlook in construction in July was more optimistic than a few months earlier. An increase in July over June to 80,000 new residential starts—near the all-time high—was an encouraging factor in a month when building usually drops. The increase in the dollar volume of residential construction was 57 percent over a year ago. Nonresidential construction was about the same as a year ago but somewhat greater than in June. A moderate rise in commercial and public utility construction was about offset by a decline in the industrial field. About 55,000 more persons were employed in contract construction in July as compared with June. This total was 190,000 more than a year ago.

Prices Continue to Rise

The advance in prices continued during July and August. The all-commodities wholesale price

index increased slowly but steadily; in the week ended August 30, it reached a level 4.3 percent above the last week in June. The main advances were in fuel and lighting materials, hides and leather products, metals and metal products, and foods. The only significant decline was in chemicals and allied products. Retail food prices reached a new record high in July. However, the rise of 1.9 percent in retail food prices between March and July is about the same as the usual seasonal increase over this period.

The price rise through August, though persistent, was not as sharp as during the previous summer following the relaxation of price controls. The 4.3 percent rise in wholesale prices during July and August may be compared with the rise of 13.8 percent for the same period in 1946.

In contrast with earlier years, the price rise for nonagricultural commodities was an important factor in the general upward trend. Compared with a year ago, wholesale prices of farm products increased 12.7 percent, foods 16.3 percent, and all other commodities 23.1 percent.

Increases in the prices of coal and steel were important factors in the rise in the index of non-farm commodities. The expected shortage of corn, resulting from the drought—the worst since 1936—was largely responsible for the increase in the prices of all grains. Some increase in meat supplies is anticipated as cattle and hogs are marketed owing to the high costs of feed. This, however, may mean more pressure on livestock prices next year. Although the large volume of food exports is still a force in the general upward pressure on food prices, supplies in general appear sufficiently large to prevent any substantial deviation from the seasonal pattern for the rest of 1947.

A special factor expected to cause a further rise in consumers' prices is the gradual readjustment of rents. If there should be a rise of as much as 15 percent, allowable under current Federal rent control, it would increase the consumers' price index by approximately 2 percent.

The Administration's concern over the rise in prices led to a renewed antimonopoly campaign by the Department of Justice and the Federal Trade Commission. Investigations were initiated of the steel and tire industries, the manufacture of colored film, gasoline distributors, and real estate brokers.

State Labor Legislation in 1947

Summary of Labor Laws in 44 States on Industrial Relations, Safety and Health, and Workmen's Compensation

ALFRED ACEE¹

FORTY-FOUR STATES met in regular legislative session during the year and, in addition, special sessions of the legislature were held in several States. Workmen's compensation and industrial relations constituted the principal subjects considered by the legislatures. Thirty States enacted legislation which regulates or restricts union activities. Fourteen passed laws which will have the effect of prohibiting closed-shop agreements. Restrictions were placed on the use of secondary boycotts and picketing. Special legislation was enacted in a number of States to regulate labor relations in public utilities.

Marked advances were made in the field of workmen's compensation. Six States enacted new occupational-disease laws, and second-injury funds were established in New Hampshire, South Dakota, Texas, Vermont, and West Virginia. The Nevada and New Hampshire laws were made compulsory instead of elective. In many States compensation benefits were increased, and in some of these States changes were made in the provision regarding medical benefits.

A few advances were made in child-labor laws, but in the field of protective legislation for women, most of the changes did not advance standards. In two States, however, equal-pay laws were

enacted. Several States passed laws relating to safety and health in industry. In some instances, however, the authority to adopt rules and regulations to control hazards of employment was placed in a State board of health rather than in the State labor department. This action continues a trend that began in 1945, under which responsibility for the safety of workers in respect to health hazards is transferred from the labor departments to health departments. Ten States in all have made this transfer of functions. A number of States also changed the statute of limitations with respect to suits brought by workers for unpaid wages or liquidated damages under the Fair Labor Standards Act.

Apprenticeship

In Florida, an apprenticeship council has been established within the industrial commission. This council is authorized to establish standards for apprentice agreements and to issue rules and regulations. A New Hampshire law provides for a system of voluntary apprenticeship and creates an apprenticeship council. The Vermont law on this subject was amended to bring the State apprenticeship council within the department of industrial relations and to establish an apprenticeship division to be under the supervision of the commissioner of industrial relations.

¹ Of the Division of Labor Standards, U. S. Department of Labor. This article is based on reports received up to September 1, 1947, as to legislative action taken by the States.

Child Labor

An important development in child-labor legislation was made in Connecticut, by the establishment of standards of employment for children in agriculture. This act applies to employers whose average number of employees is more than 15. It sets a minimum age of 14 for agricultural work and provides for a maximum 8-hour day, 48-hour week, and 6-day week for children between 14 and 15 years of age. It is to be administered by the department of agriculture, although the department of labor is vested with the administration of other labor laws. In New York and Hawaii also, laws were passed affecting agricultural work by children. The New York law makes the wartime farm-work permit requirements permanent. In Hawaii, employment certificates are now required for minors in agricultural work up to 18 years of age instead of 16.

A new child-labor law enacted in Michigan widens the occupational coverage, but permits the commissioner of labor to relax established standards or maximum hours of employment. The commissioner is authorized to establish standards for working conditions of minors under 18. A maximum 10-hour day, 48-hour week, 6-day week is established for such minors, in place of the former 10-hour day, 54-hour week. In Hawaii, the minimum age for employment of children when not legally required to attend school is raised from 12 to 14 years; this includes agricultural work.

A Massachusetts law permits women and minors over 18 to work until 11 p. m. in all manufacturing and mechanical establishments, including leather and textile manufacturing. This replaces the former provision which prohibited work in leather and textile manufacturing after 6 p. m. and in other manufacturing and mechanical establishments after 10 p. m. Another Massachusetts law eliminates the provision under which discretionary permits could be issued to children under 16 for employment in any factory, workshop, manufacturing, or mechanical establishment, and instead provides for a specific minimum age of 16 in such establishments.

In Maine, an 8-hour day, 48-hour week, and 6-day week was established for minors under 15 in any gainful occupation, except agriculture or occupations that do not offer continuous year-round employment. The child-labor law of

Minnesota was amended to require the issuance, upon request, of age certificates for minors 16 and 17. The provisions of the Connecticut law which limited employment to 9 hours a day, 48 hours a week, and 6 days a week, and prohibited work from 10 p. m. to 6 a. m., were extended to boys of 16 and 17 working in restaurants, barber shops, and certain other establishments.

Discrimination in Employment

Connecticut enacted a comprehensive act to prohibit discrimination in employment because of race, color, religious creed, racial origin, or ancestry.² The only other 1947 legislation on this subject is an Oregon law which expresses the State policy as opposed to such discrimination.

Hours

Several States made changes in laws relating to hours of employment. In Colorado, women are permitted to work more than 8 hours a day during emergencies. In such cases, however, a relaxation permit must be obtained from the Industrial Commission, and payment for overtime work must be made at the rate of one and one-half times the regular hourly rate. The Pennsylvania law was amended to permit a 10-hour day and a 48-hour week for females, instead of an 8-hour day and a 44-hour week.

In California, the war production act, which permitted female employees to work more than 8 hours a day, was repealed. Relaxation permits granted by the Governor under authority of this act were specifically repealed. In North Carolina the maximum-hours law was amended to exempt from the daily and weekly hours provisions any male employee 18 years of age or over whose employment is covered by the Federal Fair Labor Standards Act.

Industrial Relations

Most of the legislation enacted by the States with respect to industrial relations places restriction on union activities. Such legislation includes anti-closed-shop laws, restriction of picketing and other strike activities, prohibition of secondary boycotts and jurisdictional strikes, regulation of disputes in public utilities, and registration and

² For an analysis of this act see the Monthly Labor Review for August 1947, p. 198.

financial reports of labor unions. In some States separate laws were enacted on each of these subjects, while in other States an omnibus act was passed covering all types of union regulation.

The accompanying table shows State action taken on various types of regulatory laws or provisions. For example, 14 States passed anti-closed-shop laws, 12 States passed laws restricting picketing and other strike activities, and 11 States prohibit secondary boycotts. In addition, it will be noted that 6 States placed restrictions on jurisdictional disputes, and 11 States passed special laws relating to labor relations in public utilities. The Texas public-utilities law, however, is not of the comprehensive type, and relates only to picketing and sabotage. Strikes by public employees are prohibited in 6 States and registration of labor unions is required in 3 States.

In a table of this type it is impracticable to include all the features of each law. Most of the public-utility laws also restrict strike activity and regulate picketing. These provisions are not included in the table, but are discussed in this article. Similarly, some of the laws that prohibit secondary boycotts and regulate jurisdictional strikes also have provisions to restrict or regulate picketing, which are discussed only in the text and are not included in the table.

An examination of this table reveals that 5 types of laws or provisions were enacted in Missouri, Pennsylvania, and Texas, and that 4 restrictive measures were passed in Delaware, Michigan, and North Dakota. In 11 States (Arizona, California, Georgia, Idaho, Iowa, Massachusetts, Nebraska, New Hampshire, South Dakota, Utah, and Wis-

consin) two laws of this type were passed. Thus, 17 of the 30 States which acted in the field of industrial relations passed two or more restrictive laws or provisions.

Anti-Closed Shop Laws: "Right-to-work" laws, which have the effect of prohibiting the closed shop or other types of union security agreements, were enacted in Arizona, Arkansas, Delaware, Georgia, Iowa, Maine, Nebraska, New Hampshire, North Carolina, North Dakota, South Dakota, Tennessee, Texas, and Virginia.³ As most of these laws provide "that the right to work shall not be denied or abridged because of membership or nonmembership in a labor union," they prohibit not only closed shop agreements, but also other types of union-security agreements, such as the union shop and maintenance of membership. The New Hampshire law prohibiting a union-security agreement applies only to employers having 5 or less employees. Such an agreement is permitted for an employer with more than 5 employees if supported by the vote of the employees. The Maine act prohibits closed-shop contracts but permits the making or maintenance of union-shop contracts.

The Delaware law does not specifically prohibit the closed shop. However, the new labor relations act states that it is not an unfair labor practice for an employer to refuse to grant a closed shop or all-union agreement. The act also provides that every contract under which a party promises

³ A special article relating to anti-closed-shop legislation appeared in the Monthly Labor Review for June 1947. It will be noted, however, that since that article was published new legislation has been enacted on the subject.

States enacting specified types of industrial relations laws in 1947

Prohibition of closed-shops or other types of union security agreements	Restriction of picketing and other strike activity	Prohibition of secondary boycotts	Restriction on jurisdictional disputes	Regulation of disputes in public utilities	Strikes by public employees	Registration and financial reports of labor unions
Arizona. ³ Arkansas. Delaware. Georgia. Iowa. Maine. ¹ Nebraska. New Hampshire. ¹ North Carolina. North Dakota. ³ South Dakota. Tennessee. Texas. Virginia.	Arizona. Connecticut. Delaware. Georgia. Idaho. Michigan. Missouri. North Dakota. ³ Pennsylvania. South Dakota. Texas. Utah.	California. Delaware. Idaho. Iowa. Minnesota. Missouri. North Dakota. ³ Oregon. Pennsylvania. Texas. Utah.	California. Massachusetts. Michigan. Missouri. Pennsylvania. Wisconsin.	Florida. Indiana. Massachusetts. Michigan. Missouri. Nebraska. New Jersey. Pennsylvania. Texas. ⁴ Virginia. Wisconsin.	Michigan. Missouri. New York. Ohio. Pennsylvania. Texas.	Delaware. New Hampshire. North Dakota. ³

¹ Permits the making or maintenance of "union shop" contracts.

² Union security contracts are prohibited only with respect to employers having 5 or less employees.

³ Inoperative until voted upon by the people at the 1948 general election.

⁴ Relates only to picketing and sabotage.

to join or not to join a labor organization is contrary to public policy and shall not afford any basis for granting legal or equitable relief in any court of the State.

In Massachusetts an amendment to the labor relations act places restrictions on closed-shop agreements. These agreements do not apply to an employee who is not eligible for full membership and voting rights in the labor union. The law forbids an employer to discharge or otherwise discriminate against an employee for nonmembership in a labor union having a closed-shop agreement with the employer, unless the labor union certifies that the employee was deprived of membership as a result of a bona fide occupational disqualification or the administration of discipline. The act sets up procedure by which the labor relations commission can determine whether an employee has been unlawfully suspended or expelled or refused membership in the union.

Restriction of Strike Activity: Legislation to restrict or regulate picketing or other strike activity has been enacted in Arizona, Connecticut, Delaware, Georgia, Idaho, Michigan, Missouri, North Dakota, Pennsylvania, South Dakota, Texas, and Utah. Under the Delaware, North Dakota, and Utah laws, picketing is permitted only if the majority of the employees have voted in favor of a strike. In Delaware, Missouri, North Dakota, Oregon, and Utah, a strike is unlawful unless approved by a majority vote of the employees.

The Connecticut act prohibits the picketing of homes or residences. In Delaware, Georgia, Michigan, South Dakota, and Texas, mass picketing is prohibited. The Georgia law also forbids the use of force, intimidation, or violence, to prevent an individual from quitting or continuing in employment. In Missouri, picketing is prohibited when no labor dispute exists between the employer and his employees. Under the Pennsylvania law, it is an unfair labor practice for a person to picket an establishment if he is not employed there. The South Dakota law prohibits picketing accompanied by force or violence and picketing which prevents persons from entering or leaving any particular place or from using the public streets or sidewalks.

Prohibition of Secondary Boycotts: Secondary boycotts are prohibited under the laws of California,

Delaware, Idaho, Iowa, Minnesota, Missouri, North Dakota, Oregon, Pennsylvania, Texas, and Utah. Secondary boycotts usually involve refusal by persons not directly concerned in the labor dispute to handle or work on materials or supplies. Under the North Dakota law, boycotting, secondary boycotting, and sympathy strikes are declared to be against the public policy and subject to injunction proceedings as well as suits for damages. The Texas law, in addition to making secondary boycotts unlawful, prohibits secondary strikes and secondary picketing. In Massachusetts, boycotts are unlawful when engaged in for the purpose of bringing about the commission of an unfair labor practice.

Regulation of Jurisdictional Disputes: Laws regulating or prohibiting strikes in connection with jurisdictional disputes have been enacted in California, Massachusetts, Michigan, Missouri, Pennsylvania, and Wisconsin. A jurisdictional dispute usually involves a controversy between two or more labor organizations over the right of representation or jurisdiction over particular work.

The California law declares that a jurisdictional strike is against public policy and unlawful. An injunction may be issued to prevent such a strike and persons injured as a result of the strike may recover damages. In Massachusetts, if the parties to a jurisdictional dispute have submitted it to arbitration and one of them fails to comply with the terms of an arbitration award, an injunction may be obtained to prevent a strike, picketing, boycott, or other concerted interference against an employer.

In Michigan, a special procedure has been set up for the voluntary adjustment of jurisdictional disputes by means of mediation and arbitration. The amended labor relations act of Pennsylvania makes it an unfair labor practice for a labor union or its officers or agents to conduct a strike or boycott or to engage in picketing, on account of a jurisdictional dispute. In Wisconsin, it is an unfair labor practice for any person to engage in or promote a jurisdictional strike.

The Missouri law provides that it is the duty of the parties to a jurisdictional dispute between two or more labor organizations to settle the controversy without work stoppage, and if settlement cannot be reached in any other way, to submit the controversy to arbitration. If the dispute is

not settled or submitted to arbitration, the industrial commission, upon application of any of the parties or of any employer affected by the dispute, is required to make an investigation, and its determination is binding upon all parties to the controversy. The commission is authorized to conduct an election to determine the appropriate bargaining unit.

Regulation of Disputes in Public Utilities: Special legislation was enacted in 10 States to regulate industrial disputes between public utilities and their employees. These States are Florida, Indiana, Massachusetts, Michigan, Missouri, Nebraska, New Jersey, Pennsylvania, Virginia, and Wisconsin. In Texas, a law was passed which prohibits picketing and sabotage in public utilities. The Michigan and New Jersey laws amended existing legislation.

These laws generally apply to all public utilities and their employees. Some of the acts, however, contain comprehensive definitions of public utilities and specify the conditions under which the law applies. Special procedures have been established for the voluntary settlement of disputes. In most cases when either the employer or his employees desire to make a change in a collective-bargaining agreement, or in wages or working conditions, it is required that notice be given to the other party and to the mediation agency or to the governor.

The laws of Florida, Indiana, Michigan, Nebraska, New Jersey, Pennsylvania, and Wisconsin set up machinery for compulsory arbitration. In Missouri, Massachusetts, New Jersey, and Virginia, the State governor is authorized to take over and operate the public utility if the parties are unable to settle the dispute. All of the laws contain restrictions on strikes and provide severe penalties for violations. The Nebraska law prohibits any strikes or lock-outs, and Massachusetts, Missouri, New Jersey, and Virginia prohibit strikes after the public utility has been taken over by the State. Most of the laws provide that no strike or lock-out shall take place during mediation or arbitration proceedings.

The Texas act declares it to be unlawful for any person to picket the premises of a public utility or to intimidate or threaten any employee of the utility; an injunction may be issued to prevent such picketing. The Virginia act specifically

prohibits picketing after the governor has taken possession of the utility.

In Florida, Michigan, Missouri, Nebraska, New Jersey, and Pennsylvania, injunctions may be issued to enforce orders of the arbitration board. Most of the laws provide severe penalties for violations. In Florida, Missouri, and Virginia, a lock-out or strike will subject the utility or the union to a penalty of up to \$10,000 for each day of interruption of services. Less severe penalties are provided in Florida and Virginia, for individuals violating the act. In Missouri, a union officer may be punished by a fine of not more than \$1,000. In Indiana and Pennsylvania, any violation of the act by a union member acting in concert with others, or by any other individual, is punishable by a fine ranging from \$500 to \$2,500 or by imprisonment for not more than 6 months. The Michigan act makes any person violating the act subject to a fine of not more than \$1,000 or imprisonment for not more than 6 months, or both. Any person who willfully violates the Nebraska act is subject to a fine of from \$10 to \$5,000 or imprisonment for from 50 days to 1 year, or both. In New Jersey, any officer or agent of the public utility or labor union is subject to a fine of from \$25 to \$250 for any violation of the act.

Public Employees: Strikes by public employees are prohibited by laws enacted in 1947 in Michigan, Missouri, New York, Ohio, Pennsylvania, and Texas. Most of these laws provide that a violation of the act will result in termination of employment and deprivation of employment rights. In Minnesota, strikes or lock-outs by charitable hospitals and their employees are forbidden.

Labor Relations Acts: An omnibus labor relations law was enacted in Delaware. This act specifies certain unfair labor practices of employers and also those on the part of employees, and includes restrictions on closed shops, secondary boycotts, strike activity, and picketing. Unfair labor practices of employees include coercion or intimidation of an employee in the enjoyment of his legal rights, violation of the terms of a collective-bargaining agreement, engaging in a slow-down or a sit-down strike, and failing to give the required notice of intention to strike. Unions are prohibited from collecting any fee as a work permit or

as a condition of employment from any person not a union member.

The labor relations acts of Massachusetts, Pennsylvania, Utah, and Wisconsin were amended. By the Massachusetts amendment, a number of unfair labor practices on the part of employees and labor organizations were added to the law. These include strikes or boycotts for the purpose of bringing about the commission of an unfair labor practice, and interference with employees in their choice of representatives for collective bargaining. The law also makes it an unfair labor practice for a labor organization to refuse to bargain collectively with an employer who has recognized it as an exclusive representative of employees in an appropriate unit.

The Pennsylvania act makes it an unfair labor practice for an employee or a labor organization to intimidate, restrain, or coerce any employee for the purpose of compelling him to join or refrain from joining any labor organization, or for the purpose of influencing his selection of representatives for collective bargaining. Previously such action was an unfair labor practice only if accompanied by threats of force or violence. Under the amended Utah act, a labor dispute is defined as a controversy between an employer and a majority of his employees in a collective-bargaining unit. It specifies several unfair labor practices on the part of an employee, including intimidation of another employee and engaging in sit-down strikes. The Wisconsin amendment authorizes the employment relations board to conduct run-off elections to determine the bargaining representative.

In Idaho, a labor dispute is defined so as to include only the disputes between an employer and his employees. Under a Minnesota law, an employer who has entered into a valid collective-bargaining agreement with one labor organization is not compelled to enter into negotiations with any other labor organization. A North Dakota act declares that a worker shall be free to decline to join a union, but also states that workers shall have the right of self-organization and designation of representatives of their own choosing. A special board is authorized to conduct an election to determine the collective-bargaining agent. This law, however, will not be effective until approved by the people at the 1948 general election. In Oregon, the commissioner of labor

is authorized to hold an election to determine the proper collective-bargaining agent.

Mediation and Arbitration: The Connecticut State board of mediation and arbitration was enlarged by increasing the number of members from 3 to 6. The amended act authorizes the board to establish rules of procedure for the conduct of conciliation, mediation, and arbitration. The Michigan law relating to the mediation of labor disputes was amended to prohibit strikes or lock-outs until the parties have complied with all requirements of the law. If the mediation board is unable to bring about a settlement of the dispute, an election is required before a strike can be authorized. In the event of a jurisdictional dispute, the Board is empowered to determine the bargaining unit.

The North Dakota law relating to the arbitration service of the department of labor was changed by reducing arbitration panels from 5 to 3 persons. In Washington, the arbitration law was amended to provide that an arbitration agreement between an employer and his employees may provide a procedure for settlement of existing or future disputes. It specifies that such procedure shall be valid and enforceable.

Union Registration and Financial Reports: The laws of Delaware, New Hampshire, and North Dakota include provisions for union registration and the filing by unions of financial reports with State agencies. Under the New Hampshire law, however, such reports are required only when the union has entered into a union-security contract with the employer. The Delaware law includes detailed regulations for the election of union officers and for making changes in the amounts of dues and assessments.

Several State laws provide that labor organizations may sue or be sued, some of these laws specifying that unions are responsible for actions of their authorized representatives. Laws of this type were enacted in Arizona, Delaware, Minnesota, Nebraska, North Dakota, South Dakota, and Texas. Under the Texas law, a labor organization whose members engage in picketing or strike are liable for damages in the event such picketing or strike is held to be a breach of contract.

Check-off of Union Dues: Laws in several States place restrictions on the use of the "check-off,"

which permits the deduction of union dues by the employer, for the union, from his employees' wages. In most cases the check-off is permitted only if authorized by the employee. Such laws were enacted in Arkansas, Delaware, Iowa, Rhode Island, and Texas. The North Carolina, Tennessee, and Virginia laws make it unlawful to require any person, as a condition of employment, to pay any fee or assessment to a labor organization. The anti-closed-shop laws of Arkansas, Georgia, and Iowa contain similar provisions.

Safety and Health

Five States—Arkansas, Colorado, South Carolina, Vermont, and Wyoming—transferred responsibility for the safety of workers in respect to health hazards from the labor departments to the State health departments or similar agencies. In Oregon, the State board of health is designated as the State agency to receive grants from the Federal Government for industrial hygiene programs.

Under the Arkansas law, a division of industrial hygiene is established in the State board of health. It is authorized to investigate places of employment as to industrial health hazards and to adopt rules and regulations to control such hazards. In Colorado, the State department of public health is authorized to enforce sanitary standards for the operation and maintenance of factories, workshops, and industrial and labor camps.

A South Carolina law provides that the State board of health shall make rules and regulations for the control of industrial plants, including protection of workers from fumes, gases, and dusts. In Vermont, the State board of health is empowered to inspect establishments where there are dusts, fumes, or processes adversely affecting the health of their employees, and to issue rules and regulations. Under a Wyoming law, the department of public health is authorized to enforce sanitary standards for the operation and maintenance of factories, workshops, and industrial and labor camps.

In Hawaii, a division of industrial safety is established in the bureau of workmen's compensation. The division is authorized to inspect places of employment for the purpose of insuring adequate protection to workers. It is specifically directed to enforce rules and regulations made by the commission of labor and industrial relations for

the protection of life, health and safety of employees. Under a North Dakota law, provision is made for a State safety engineer in the workmen's compensation bureau. He is required to perform certain duties relating to accident prevention, including a study of industrial hazards in industrial plants and the means of preventing accidents.

Wages

Most of the action taken by the State legislatures with respect to the general subject of wages concerned the statutes of limitations for the recovery of wages. In New York, however, the minimum-wage law was amended to require that all orders issued by the labor commissioner under this law be mandatory, instead of directory. Equal-pay laws were enacted in New Hampshire and Pennsylvania; these laws prohibit discrimination in wages because of sex. In Vermont, the commissioner of industrial relations was authorized to investigate wages and hours in intrastate industries, and to make a study of the need for a minimum-wage law for such industries.

Legislation was enacted in California, Connecticut, Idaho, Massachusetts, New Mexico, and South Dakota changing statutes of limitation for wage claims. Under these laws, a time limit is set for bringing suit for unpaid wages. In California, the law provides a 2-year statute of limitations for the recovery of wages, in place of the previous 3-year requirement. Laws enacted in Connecticut and Idaho also provide for a 2-year statute of limitation. Another Idaho law places restrictions on portal-to-portal claims, and declares it to be contrary to public policy for persons to sue for alleged overtime for nonproductive work. The act sets up methods of determining "hours worked."

A Massachusetts law provides that actions to recover back wages based upon a judicial interpretation of a State or Federal statute overruling a previous interpretation of that statute, shall be commenced within 1 year after the date of the new judicial interpretation. In New Mexico, actions for the recovery of unpaid overtime compensation must be brought within 1 year after the cause of action accrues. The South Dakota law, which provided for a 1-year statute of limitations, was increased to 2 years for actions for the recovery of wages, penalties, or liquidated damages regulated

by State or Federal statute or provided for by contract.

Workmen's Compensation

The most outstanding progress made in the field of workmen's compensation was in occupational-disease legislation and second-injury funds. Many States also increased benefits for both disability and death and made changes in the provisions regarding medical benefits. An article giving complete and detailed information regarding changes in the State workmen's compensation laws will appear in the October issue of the Monthly Labor Review.

Occupational-disease laws were enacted for the first time in Iowa, Nevada, New Hampshire, South Dakota, Tennessee, and Texas. This makes a total of 39 States which completely or partially protect workmen against the hazards of occupational diseases. None of the laws passed this year provides for general coverage. Instead, they are of the schedule type, and list certain diseases which are compensable. The Tennessee law, however,

has a special provision which permits an employer to reject the schedule and elect to be bound for full coverage for all occupational diseases.

The Nevada law was completely reenacted and made compulsory instead of elective. The New Hampshire law was also made compulsory, and some administrative duties were vested in the commissioner of labor; previously the system was completely under court administration. A number of States provided for increased benefits, some by raising the maximum weekly payment and some by authorizing compensation for the entire period of disability instead of limiting it to a specified number of weeks.

Second-injury funds were established in New Hampshire, South Dakota, Texas, Vermont, and West Virginia. As a result, there are now 36 States which have second-injury funds or equivalent arrangements. The previous law in West Virginia provided for an "equivalent arrangement" under which payment for second injuries was made from the regular accident fund. The amendment sets up a special second-injury reserve in the surplus fund.

Great Britain: Wage Trends and Policies, 1938-47

JEAN A. FLEXNER¹

WAGES AND PRICES in Great Britain were relatively stable during the World War II and postwar periods, compared to the many-fold increases in wages and prices in France² and other countries of Europe.

Although Great Britain had succeeded in maintaining the stability of the wage earners' income and purchasing power up to the late summer of 1947, her economy was being subjected to its greatest strain; her long-standing policies in regard to wage determinations were being put to the severest test thus far.

British weekly wage rates rose about 66 percent from September 1939 to May 1947. Weekly earnings in October 1946 were 90 percent higher than in October 1938.³ Prices also rose; according to the official cost-of-living index, retail prices both in October 1946 and in May 1947 were 31 percent above 1938 and 1939 levels. Even allowing for a considerable understatement in the cost-of-living

¹ Of the Bureau's Staff on Foreign Labor Conditions. This study is based on official British sources, and on trade-union and other publications.

² See August 1947 issue of *Monthly Labor Review* (pp. 149-157).

³ The percentage increase in rates of wages for a full week's work, is estimated each month by the Ministry of Labor for industries, occupations, and localities in which changes are regulated by collective agreements, arbitration awards, or statutory orders. In combining these percentage increases into a general average the various components are weighted according to the employment distribution in 1939. The average percentages are considered to be rough approximations only.

The Ministry of Labor also obtains returns from employers, at approximately 6-month intervals showing number of wage earners actually at work, aggregate earnings, and total number of man-hours worked, for the following groups: the principal manufacturing industries; mining, except coal; public-utility services; building; transport, except railways; and government industrial establishments. The returns cover almost 6 million workers. The averages for individual industries are weighted on the basis of total numbers employed at the time in each industry. Two part-time women workers are counted as one full-time worker. The index of weekly earnings is based on national averages of these returns as calculated by the Ministry of Labor.

index (recently discontinued by the Government because of its deficiencies) real wages in 1947 were probably near or even slightly above prewar levels.

The wage structure in Great Britain did, however, undergo changes that were similar to those occurring in many other countries. There was a tendency toward the narrowing of differentials between male and female, skilled and unskilled workers, and between various industries.

Wage policies as well as wage trends differed in Great Britain from those of many continental countries. Government concentrated upon price controls for necessary foods and provision of a greater supply of "utility" goods in the clothing and housefurnishing categories, leaving wages subject to voluntary controls, and thus sought to minimize one of the main sources of demands for higher wages—the rising cost of living.

In spite of the relative stability of wages and prices in Great Britain, even a moderate wage-price spiral can further impair her ability to export enough to pay for necessary imports, in view of her loss of overseas investments, shipping, and other assets during the war. To provide both for exports and for home consumption, Britain must pay close attention to productivity, labor costs, and total output. In this critical postwar period, a Labor Government came to office, committed to a program of sweeping social and economic reforms. Moreover, full employment of the available labor force and manpower shortages have enhanced the bargaining power of the trade-unions, and while moderate in demands for wage increases, they have vigorously and successfully pushed demands for shorter hours without loss of pay, for longer paid vacations and more paid holidays. The Government has tried to reconcile trade-union demands and social reforms with Britain's acute need for more exports at steady costs by a variety of measures designed to improve industrial efficiency. The Government has also warned that Britain cannot afford the luxury of shorter hours unless it can be shown that total output will not suffer.

Wage Trends, 1938-47⁴

Money Wages: In October 1946 (the latest date for which data are available) average weekly

⁴ See also *Wartime Hours and Earnings in the United States and Great Britain*, *Monthly Labor Review*, July 1944. Reprinted as Serial No. R 1670

earnings for 16 major industrial groups surveyed by the Ministry of Labor were 90 percent higher than in October 1938, and even slightly exceeded the wartime peak. Earnings declined after July 1944, but rose again sharply after January 1946 (table 1).

The rise in earnings during the war period is attributable in part to the extension of wage-incentive systems, to workers' shifting from lower-paid into higher-paid occupations, as well as to longer hours, overtime rates, and to increases in wage rates.

TABLE 1.—United Kingdom: Indexes of weekly wage rates and earnings and cost of living, 1938-47¹

Dates	Cost-of-living index	Weekly wage-rate index	Weekly earnings index
1938 (October).....	100	^a 100	100
1939 (September).....	100	100	-----
1940.....	119	111-112	^a 130
1941.....	128	121-122	^a 142
1942.....	129	130	^a 146-161
1943.....	128	135-136	^a 165-176
1944.....	130	142-143	^a 179-182
1945.....	131	149-150	^a 176-180
1946.....	131	161-162	^a 174-189
1946: January.....	131	153	174
February.....	131	157	-----
March.....	131	157-158	-----
April.....	131	158	-----
May.....	132	159-160	-----
June.....	131	160-161	-----
July.....	132	161	189
August.....	132	163-164	-----
September.....	131	163-164	-----
October.....	131	164	190
November.....	131	164	-----
December.....	132	165	-----
1947: January.....	132	165	-----
February.....	131	165	-----
March.....	132	165-166	-----
April.....	131	165-166	-----
May.....	131	166	-----
June.....	131	166-167	-----
July.....	131	166-167	-----

¹ Source: Ministry of Labor and National Service, and Central Statistical Office, London.

² This figure has been estimated from the Ministry's weekly wage-rate index based on 1924 which was 106 both in the fourth quarter of 1938 and the third quarter of 1939.

³ Figure relates to July.

⁴ Figures relate to January and July.

During the war years, hours were considerably lengthened, the weekly average reaching 50 in July 1943; they were gradually reduced to a low point of 45.8 in January 1946. In October 1946 the average (46.2) was not very different from that (46.5) for October 1938. Since VJ-Day, the scheduled hours of about 5.5 million workers were reduced from 47 to 44, according to the Minister of Labor's statement in Parliament on July 3, 1947. Hours were shortened without reduction in weekly pay, and in some cases with increased pay, in a number of important industries,

including agriculture, printing, textiles, engineering trades, government industrial establishments, shipbuilding and repair, road haulage, coal mines, and finally the railroads. The National Union of Mineworkers decided in July 1947 to ask for a weekly increase of £1, following the introduction of the 5-day week on May 1. Agricultural workers obtained a second wage increase effective in August 1947.

The guaranteed workweek has also increased workers' incomes. It was introduced by Government order during the war as a safeguard for workers who were frozen in their jobs, on condition that they were willing to perform work other than their regular jobs, and was later incorporated into many postwar collective-bargaining agreements. The guaranty may cover the full workweek (e. g., 44 hours in government industrial establishments) or a portion of it. Workers are paid for a guaranteed number of hours, in spite of irregularities or interruptions in the flow of work. During the shut-downs occasioned by the fuel crisis in February and March 1947, workers covered by such agreements which did not specifically except circumstances beyond the employers' control, were paid to stand by unless they were given formal notice of lay-off. It is estimated that in 1947 about 2.5 million employees had at least part of their workweek guaranteed.

Wage-rate increases were an important factor in increased earnings, especially during the latter part of the period under consideration. The official weekly wage-rate index rose from 100 in October 1938 to 142-143 in 1944; the earnings index reached a wartime peak of 182 in July 1944. Thus, about half the increase in weekly earnings could be attributed to increases in rates and the remainder to the other factors mentioned and to changes in piece rates. After mid-1944, time-rate changes became even more important, since hours tended to drop and employment tended once more to shift toward the lower-paid civilian goods industries. Between 1944 and October 1946, the rise in the weekly wage-rate index again greatly exceeded the rise in earnings (see table 1). The increase in rates helped to offset a decrease in hours and cut-backs in employment in high-paying war industries.

Rate increases were in many industries tied automatically to increases in prices and living costs. Collective agreements covering 1.5 million

workers in 1939 regulated wage rates according to cost-of-living sliding scales; coverage in April 1947 was 2.5 million. A majority of these workers received additional increases in wage rates or war supplements. The industries affected by cost-of-living sliding-scale arrangements include coal mining, iron and steel, certain textile trades (including wool manufacture), boots and shoes, woodworking, building and civil engineering, and local authorities' nontrading services.

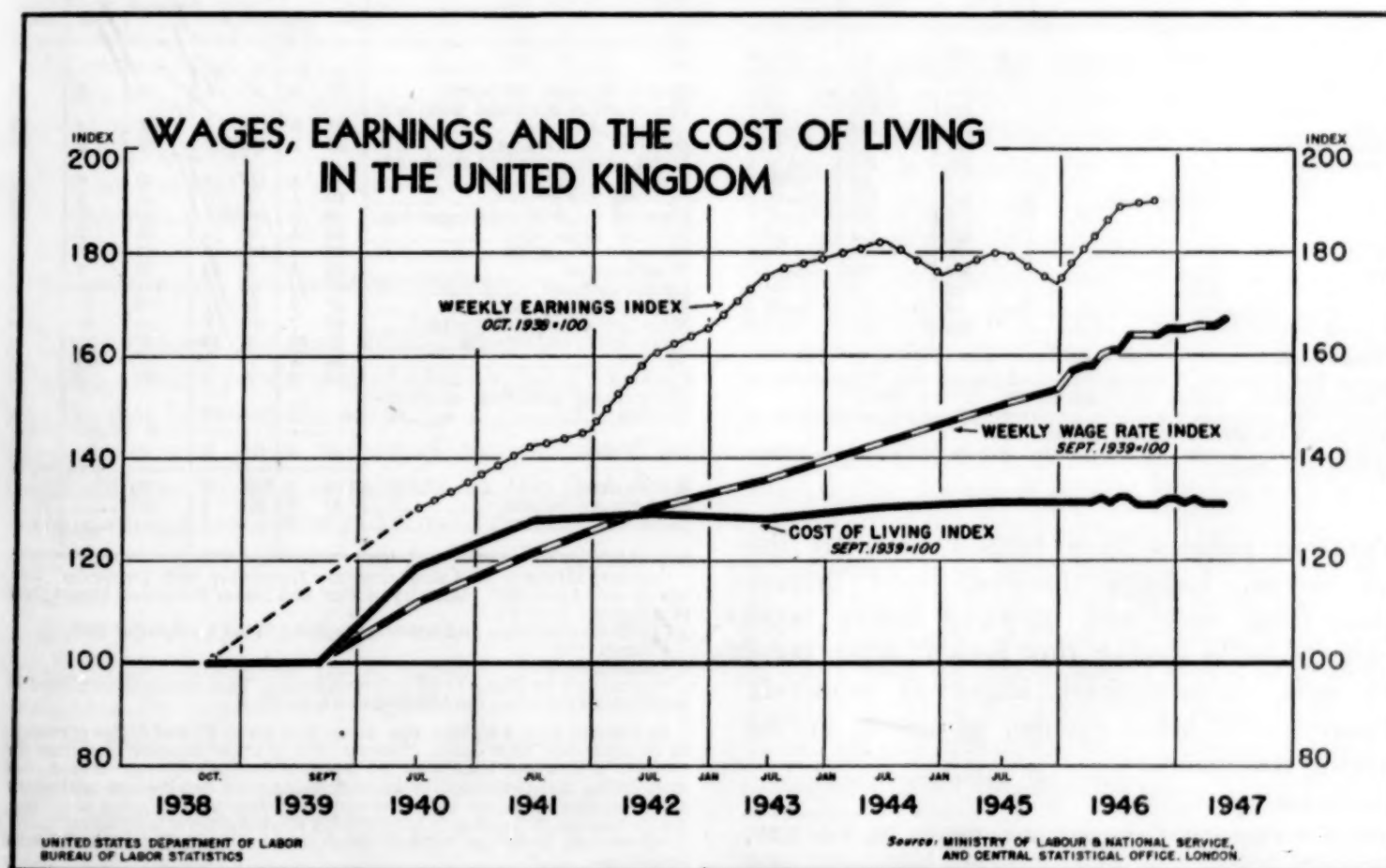
After August 1946, married persons with children received supplemental family allowances. Under an act of June 15, 1945, payments of 5s. per week are made for every child except the first, up to the age of 15, or 16 provided the child is attending school full time or is apprenticed. The scheme applies to families at all income levels. Earnings data do not include these supplements.

Real Wages: In order to give a true picture of changes in wage earners' purchasing power, money earnings must be deflated by an index showing the advance, during the period, of retail prices for items commonly consumed by wage earners' families. The official cost-of-living index, started

during World War I, was based on an obsolete pattern of wage earners' expenditures, however. (The relevant studies had been made in 1904, with some later adjustments.) In the spring of 1947, on the advice of an advisory committee, the Government decided to discard the old and, pending the development of a permanent index, to substitute an interim index of retail prices.⁴

During the period October 1938 to October 1946, the cost-of-living index (September 1939 = 100) rose from 100 to 131, and was stabilized close to that figure until its termination in June 1947 (table 1). This very moderate increase may be compared with estimates derived from another source. Data on total personal expenditures on consumers' goods and services for all income levels have been published for a number of years by the British Treasury, valued both at current prices and at 1938 prices. These data reveal that the prices of consumers' goods and services increased approximately 53 percent between 1938 and 1946. On the basis of the same figures, Prof. R. G. D.

⁴ See Monthly Labor Review, August 1947, p. 195.



Allen, a member of the Ministry of Labor's Cost of Living Advisory Committee, has unofficially estimated the price rise from 1938 to mid-1947 to be about 60 to 65 per cent.⁵

Further light is shed on the question of post-war levels of living by table 2. Increased money earnings could not be spent on more or better clothes and household goods, and could purchase but little if anything more in the way of housing, because the supply of such things was limited. On the other hand, the price and rationing policies assured all groups in the nation a fair share of the available supplies of the most necessary commodities, based on family needs, at reasonable prices. A marked shift from private motoring to public transportation, and an increased expenditure for travel, entertainment, tobacco, alcoholic beverages, fuel and light, are indicated in table 2; expenditures for household goods and clothing declined.

TABLE 2.—United Kingdom. Personal expenditures for consumers' goods and services, 1938 and 1946, revalued at 1938 prices¹

Items	Expenditures (in millions)		Percent change
	1938	1946	
All items ²	£4,252	£4,296	+1.03
Food.....	1,258	1,232	-2.1
Household goods.....	288	191	-33.7
Clothing.....	446	330	-26.0
Motoring (private).....	127	71	-44.1
Fuel and light.....	195	215	+10.3
Income in kind (armed forces).....	17	81	+376.5
Alcoholic beverages (including beer).....	285	320	+12.3
Tobacco.....	177	236	+33.3
Rent.....	491	514	+4.7
Books, etc.....	64	88	+37.5
Travel.....	160	226	+41.3
Communications.....	29	42	+44.8
Entertainment.....	64	102	+59.4
Other goods and services ³	658	576	-12.5

¹ Source: Great Britain, Treasury, National Income and Expenditure of the United Kingdom, 1938 to 1946, table 26, 1947. (Cmd. 7099.)

² The total is not the exact sum of items shown because a small adjustment factor shown in the original table is omitted here.

³ Includes medical service, drugs, personal and domestic service, certain recreational expenditure.

Taxation policies have tended to favor the wage earner. Labor's share of total private income from work and property before taxes remained stable during this period; after taxes were paid, labor's share improved relatively compared with other groups, as shown in the following statement.

⁴ London & Cambridge Economic Service, Bulletin III, Vol. XXV, August 11, 1947, p. 75.

Percentage distribution of total private income from work and property¹

	1938	1945	1946
Before taxes on income:			
Wages.....	37	37	38
Salaries.....	23	20	21
Interest, profits, and rent.....	40	43	41
Total.....	100	100	100
After taxes on income:			
Wages.....	39	44	44
Salaries.....	24	22	23
Interest, profits, and rent.....	37	34	33
Total.....	100	100	100

¹ Source: Great Britain Treasury. National Income and Expenditure of the United Kingdom, 1938-46. Table 9, p. 11. London 1947. (Cmd. 7099.)

Changes in Wage Structure: Average weekly earnings of all workers in 16 industry groups increased from 53s. 3d. in October 1938 to 101s. in October 1946, or 90 percent (table 3). The rate of increase,

TABLE 3.—United Kingdom: Average weekly earnings by industry group, 1938 and 1946¹

Industry group	Weekly earnings, all workers		Percent increase ²	Rank in—	
	Oct. 1938	Oct. 1946		1938	1946
	s. d.	s. d.			
Transport (except railways).....	67 6	110 4	68	1	3
Treatment of nonmetal mine and quarry products ³	61 6	116 0	90	2	1
Building, contracting.....	61 3	103 0	68	3	6
Metal, engineering and shipbuilding.....	59 5	114 4	92	4	2
Public-utility services.....	59 5	97 6	63	5	10
Ironstone, etc., mining and quarrying.....	56 5	107 8	90	6	5
Printing, paper, etc.....	55 5	96 11	68	7	11
Chemicals, paint, etc.....	55 4	100 10	83	8	7
Woodworking.....	52 4	99 10	93	9	9
Leather, fur, etc.....	47 10	95 7	104	10	13
Brick, pottery, glass.....	47 9	96 11	103	11	12
Miscellaneous manufacturing.....	47 7	100 7	116	12	8
Food, drink, and tobacco.....	46 10	87 10	87	13	14
Textiles.....	38 3	78 3	107	14	15
Clothing.....	35 7	70 0	100	15	16
Government industrial establishments.....		108 10	54		4
Total.....	53 3	101 0	90		
Railwaymen.....	68 9	121 6	77		
Coal miners: in cash.....	55 9	114 3	105		
in kind.....	2 2	4 1			

¹ Source: Ministry of Labor Gazette, November and December 1940; March and April 1947. Ministry of Fuel and Power Statistical Digest, 1945 (Cmd. 6920), table 40.

² Includes coke, lime and cement, the group listed for October 1938.

³ March 1939.

⁴ March 1946.

⁵ Calculated by Ministry of Labor on basis of total numbers employed in each industry group. See also footnote 6, p. 289.

In October 1938, 1 shilling was worth 23.8 cents, United States currency; in October 1946, 20.17 cents. Comparisons of wages between countries are difficult to interpret because of the fact that foreign exchange rates do not truly reflect international differences in living costs and because of the lack of information on relative productivity by industry in different countries. On the average, differences in productivity markedly favor the United States. Furthermore, there are marked differences in productivity in different industries.

however, was by no means uniform in the different industry groups. While railways, other forms of transport, metal, engineering and shipbuilding remained at the top, certain industries dropped back (e. g., building, from third to sixth place; public utilities, from fifth to tenth place; and printing and paper, from seventh to eleventh place). The relative position of coal miners and of workers in miscellaneous manufacturing improved greatly. On the other hand, textiles, brick, pottery, glass, clothing, food, drink and tobacco, and leather all remained relatively low paid.

Differentials between the highest and lowest paid industries, however, narrowed somewhat during the period: in 1938 the lowest paid group, clothing, was 52.7 percent of the highest paid group; in 1946, it was 60.3 percent. In October 1938 earnings in textiles were 64 percent of those in engineering, and in October 1946, 68.4 percent.

Earnings of workers, classified by age and sex, in October 1938 and October 1946, are shown below.⁶ Changes in the relationship between these rates is shown by taking the men's rate in both years as 100.

October 1938:	s.	d.	Ratio
Men 21 and over.....	69	0	100
Women 18 and over ¹	32	6	47
Youths and boys.....	26	1	38
Girls.....	18	6	27
October 1946:			
Men 21 and over.....	120	9	100
Women 18 and over ¹	65	3	54
Youths and boys.....	46	6	39
Girls.....	38	8	32

¹ Two women working part-time are counted as one working full time.

Little change occurred during the period in the relative earning power of men and youths under 21, but the gap between the earnings of adult men and of women and girls narrowed somewhat. The large differential is due in part to the fact that certain occupations are traditionally women's and that men's occupations are frequently closed to women.

Even in wartime, when women invaded fields traditionally occupied by men, they were usually assigned to unskilled or semiskilled jobs; and skilled work was "diluted" (i. e., subdivided into

relatively simple tasks). Numerous collective agreements made during the war period provided that women employed on men's work should receive the full rate, after a training or probationary period, if they could perform the work equally well without additional supervision or assistance; a proportion of the full rate was to be paid if supervision or assistance was required. In the engineering industries the classification of the work was the subject of many disputes.⁷

Since 1945 prolonged negotiations by the engineering unions for a revision of the wage structure to equalize the rates of pay for men and women have been fruitless. The employers refused to abolish the women's schedule and offered them a lesser increase than that agreed to for the men, thus actually widening the gap. This offer was upheld in a national arbitration award of June 25, 1946.

Evidence presented to the Royal Commission on Equal Pay indicated that, on the same types of semiskilled work in the engineering trades, women's piece rates were 54 percent of the men's in September 1939 and 68.5 percent in June 1946. In the clothing industry, time rates for women were 64 percent of those for men on identical work.

Although since the war women have been leaving their jobs and the Government has been impelled to launch an urgent recruiting campaign for women workers, these inequities remain a deterrent rather than an incentive to women workers. A majority of the Royal Commission on Equal Pay, reporting in October 1946, feared that application of equal rates of pay for equal work in industrial employment might retard national output and limit opportunities for the employment of women. A dissenting minority found that "any difference in efficiency is considerably less than the difference in wage rates." A unanimous recommendation was made by the commission for equal pay in the teaching profession and Government service. The Government, while agreeing in principle, has decided not to act at the present time, asserting that such action might raise costs and produce inflationary effects. A card vote at the Labor Party Conference in June, overruling the Executive, strongly endorsed the equal pay principle but did not cause the Government to alter its decision.

⁶ Source: Ministry of Labor Gazette, November 1940 (p. 280), December 1940 (p. 306), and April 1947 (p. 106). The 1938 figures are derived from numbers shown on returns; the 1946 figures are weighted by total employment.

⁷ International Labor Organization. *The War and Women's Employment: Part I, United Kingdom*, pp. 67-72. Montreal, 1946.

The differential between time rates for skilled and unskilled workers has been gradually narrowing over a long period of time, as follows: ⁸

	Time rates of wages			
	1914	1927	1940	
Engineering industry:				
Fitters and turners...	38s. 11d.	58s. 1d.	106s. 11d.	
Laborers.....	22s. 10d.	41s. 8d.	89s. 3½d.	
Shipbuilding:				
Shipwrights.....	41s. 4d.	55s. 7d.	104s. 0d.	
Laborers.....	22s. 0d.	38s. 5d.	85s. 0d.	
Engineering industry:	Ratios			
Fitters and turners...	100	100	100	
Laborers.....	59	72	84	
Shipbuilding:				
Shipwrights.....	100	100	100	
Laborers.....	53	69	82	

In the building industry, laborers received 75 percent of the rate for craftsmen before World War II, and 80 percent after.

These differentials are enhanced if the skilled workers are engaged on piece work; in the engineering trades, the piece rates, by union agreement, are supposed to enable workmen of average ability to earn 27½ percent above the basic time rate.

Wage Policies, 1938-47

The only wage legislation in effect in Great Britain prior to World War II consisted of the Truck Acts regulating the place and medium of wage payment, acts providing machinery for fixing minimum wages in agriculture, transport, and in certain substandard industries, and a House of Commons Resolution requiring payment of recognized rates of wages by government contractors. ⁹

Except in industries where wages were set by trade boards or similar bodies, wage rates in general were determined by collective bargaining between employers and unions or by joint industrial councils. ¹⁰ After the outbreak of war, the Government decided to continue to rely upon the peacetime machinery for making such wage adjustments as were necessary. This was modified by the Conditions of Employment and Arbitration Order, adopted July 25, 1940, which set up a National Arbitration Tribunal for the

settlement of any labor dispute, referred to it by the Minister of Labor and National Service, which could not be disposed of otherwise. ¹¹ Part III of the order made it obligatory for employers to observe terms and conditions of employment which were settled by collective bargaining or by arbitration awards for their trade and district.

Wartime Stabilization Policies: At no time during the war did the British Government promulgate a hard and fast policy of holding the line on wages. The National Arbitration Tribunal was permitted to decide wage disputes on a pragmatic basis, case by case. No criteria or standards for adjudication of wage disputes were issued. Furthermore, the British tribunal did not have jurisdiction over nondispute cases; employers who were willing to grant increases either unilaterally, or in collective bargaining, did not have to obtain Government approval.

Government policy concentrated upon controlling the prices and rationing the supply of the main items in the wage earners' budget, so as to eliminate the chief reason for demands to raise wages.

The white paper on Price Stabilization and Industrial Policy issued July 1941 made it clear that the Government's promise to prevent the cost-of-living index from rising more than 30 percent over the level of September 1939 could be kept only if wages were also stabilized. Employers and trade-unions were asked to "bear in mind, particularly when dealing with general wage applications, that the policy of price stabilization will be made impossible and increases of wage rates will defeat their own object, unless such increases are regulated in a manner that makes it possible to keep prices and inflationary tendencies under control."

Actually the official cost-of-living index (September 1939=100) did not rise above 134, reaching that figure in July 1945, after which it dropped back to about 132. This result was achieved by means of strict rationing, distribution controls, and subsidies for those items which figure largely in the index. In the case of clothing and household goods, manufacturers were directed to produce supplies of low-cost, plain utility goods, at the expense of more luxurious items. ¹²

¹¹ See Monthly Labor Review, August 1946, Settlement of Industrial Disputes in 7 Foreign Countries (reprinted as Serial No. R. 1848).

¹² See U. S. Bureau of Labor Statistics Bulletin No. 851: Wartime Prices, Price Control and Rationing in Foreign Countries, 1945 (p. 23).

⁸ Source: Ministry of Labor Gazette (London), October 1927 (p. 309); and Time Rates of Wages, 1946 (pp. 26, 29). Ratios were computed by the Bureau of Labor Statistics.

⁹ The Truck Acts of 1837, 1887, and 1896 prohibited payment in a public house and payment in kind; Trade Board Acts of 1909 and 1918, Agricultural Wages Regulation Act, 1924; Road Haulage Wages Act, 1938; Fair Wages Resolution, 1909. See Ministry of Labor, Industrial Relations Handbook 1944 (London), also Monthly Labor Review, May 1938, or Serial No. R. 700; Monthly Labor Review, May 1939, or Serial No. R. 932.

¹⁰ See Monthly Labor Review, June 1947, pp. 1019-1028, reprinted as Serial No. 1893.

Policy with regard to criteria for allowing price increases was elastic also. Price increases based on higher costs including wages were permitted from time to time by the ministries or departments charged with the control of particular commodities or services. In the case of subsidized commodities, the additional cost was sometimes absorbed by the Government.

Postwar Wage Policies: The enactment of the Wages Council Act in March 1945, to replace the prewar Trade Boards Acts, represented a new stage in minimum-wage regulation by the State.¹³ It continued for another 5 years the wartime obligations of employers to observe recognized standards of wages and working conditions. It enlarged the powers of the old trade boards, permitting them to provide for paid annual holidays of more than 1 week and to fix a guaranteed wage (i. e., wage to be paid for a certain number of hours regardless of whether or not work was provided).

The wartime stabilization policies for both wages and prices were continued but were subjected to new pressures created by full employment and unsatisfied market demands in the postwar period. Wage increases were asked by unions both in low-paid and in high-paid industries—the former on the grounds that improvements were needed for the purpose of attracting labor, now that wartime manpower controls were relaxed and workers could no longer be directed into employment; the latter, because skilled workers were at a premium.

Demands for shortened workweeks without loss of pay and for longer paid vacations had the effect of raising hourly rates, if not weekly rates.

During the latter half of 1945 and during 1946, wage rates continued to mount, and scheduled hours of work were reduced. One industry after another adopted the 43½- to 45-hour week (in place of 47 or 48) with the same weekly take-home pay as for longer hours, either through collective bargaining or as a result of recommendations handed down by courts of inquiry appointed by the Minister of Labor. In August 1945, the Ministry's index of weekly wage-rate changes (September 1, 1939=100) stood at 150.5 and a year later, at 163.5. By March 1947, it reached 165.5 and remained at that level for several months.

Meanwhile, the cost of the subsidies designed

to steady the cost-of-living index (of which over 90 percent was spent for food subsidies) became increasingly burdensome. In his budget speech of 1946, the Chancellor of the Exchequer warned that the policy must soon be reconsidered, especially if prices of imports continued to mount. Between April 1946 and April 1947 the index of prices of all imports, based on 1938 as 100, rose from 200 to 234 and the index for prices of imported food, drink, and tobacco, from 200 to 229. Food subsidies cost £50,000,000 more than the estimate for 1946-47, and foreign prices continued to rise. In the spring of 1947, an advisory committee recommended discontinuance of the old cost-of-living index, in which food had a weight of 60 percent, and the introduction of an interim index giving food purchases a weight of 35.

The new index, because of the inclusion of more items, will be less subject to stabilization through subsidies and price controls than the old one, and a modified policy will have to be developed. Mr. Dalton, Chancellor of the Exchequer, indicated that the Government would no longer aim at complete stability and hoped thereby to save the taxpayer some money.

After reiterating at intervals since VJ-day its determination to leave questions of wages and hours to the long-established and well-tried machinery for joint negotiation, the Government early in 1947 began to evince alarm over the inflationary trends and to issue warnings concerning the state of the economy. White papers published in January and February 1947¹⁴ stressed that primary and overriding consideration must be given to maximizing output and steadying costs, if Britain was to regain her international solvency. Both sides of industry were urged to drop restrictive practices, to introduce incentive pay and to consult together on methods of improving efficiency. "The nation cannot afford shorter hours of work," said the Government, "unless these can be shown to increase output per man-year." Sir Stafford Cripps, President of the Board of Trade, and Herbert Morrison, Lord President of the Council, in addressing conferences of employers and trade-unions and the House of Commons, clarified and emphasized the message of the white papers. The fuel crisis of the late winter re-

¹³ See Monthly Labor Review July 1945 pp. 120-123 and Ministry of Labor Gazette, December 1944 p. 194.

¹⁴ Great Britain: Statement on the Economic Considerations affecting Relations between Employers and Workers, London, 1947 (Cmd. 7018). Economic Survey for 1947, London, 1947 (Cmd. 7046). See also Ministry of Labor Gazette (London), February 1947, pp. 38-40.

inforced the urgency of these pleas for larger production at lower cost. From conservative quarters demands multiplied for governmental formulation of a comprehensive wage policy—meaning more rigid stabilization, a rationalized wage structure designed to redistribute labor according to postwar needs, and greater use of incentives. The advisability of the 5-day week was seriously questioned.

A motion to adopt a comprehensive national policy on wages, hours, and the distribution of national income, was debated at the May 1947 conference of the Labor Party. At the same time, a motion to provide special incentives for mining and other undermanned industries was introduced. Both propositions were opposed by Mr. Arthur Deakin, General Secretary of the Transport and General Workers' Union, who declared that in no circumstances would the unions agree to governmental responsibility for fixing wages and regulation of conditions of employment, or to altering the method of negotiation within industry. The question of incentives, wages, and conditions of

employment, he declared, was a question for the trade-unions and not for the political side of the movement. Both motions were defeated. A more general resolution was then accepted urging the adoption of satisfactory wage standards and conditions of employment as a means of attracting labor to the undermanned industries.

In replying to questions raised in a Parliamentary debate on productivity, July 3, 1947, the Minister of Labor thus summarized the Government's program: (a) there will be no general regulation of wages; (b) productivity can be increased by asking management to improve working conditions and amenities and by promoting joint consultations between both sides at the plant level; (c) payment by results is being encouraged.¹⁵ Comprehensive revision of the wage-rate structure is being considered by employers and unions in the engineering trades, and has been recommended by the Court of Inquiry for railroads.

¹⁵ Negotiations in the building industry during the month of July 1947 resulted in agreement at the national level to accept partial payment by results.

Job Prospects in Plastics Products Industry

SOL SWERDLOFF

and CALMAN R. WINEGARDEN¹

AT THE END OF 1946, the number of jobs in the plastics products industry was higher than the wartime peak, and nearly three times the employment in 1939. Because stories of spectacular future growth have been widely circulated, many veterans, young people in school, and others making the choice of an occupation are looking to this industry for new and promising job opportunities.

During World War II there was great expansion within the industry, with 85 percent of its output going directly or indirectly into military uses. Since then, greatly increased peacetime uses of plastics products have more than taken the place of their military uses. Prospects are for a relatively large increase in employment in the industry during the next few years and for steady growth thereafter. Most of the openings, however, will be for semiskilled and unskilled production workers.

This article discusses the types of work that are found in the plastics products industry, earnings and working conditions, the industry's production prospects, and the outlook for employment.

Characteristics of the Industry

Plastics are synthetic organic materials which, through application of pressure or heat or both, may be formed into almost any desired shape. They are man-made from substances like coal,

petroleum, wood, and cotton. Although not entirely of recent origin, plastics are mainly products of modern research.

Not only are plastics easy to shape, but they have many other useful properties. Generally they are light, resistant to corrosion, easy to color, odorless, and tasteless. Some are noted for toughness, electrical insulating qualities, transparency, resistance to water, or flexibility. Plastics products constitute parts of electrical appliances, automobiles, airplanes, and industrial equipment of various kinds, and are seen in daily use as radio cabinets, toys, novelties, bottle tops, and telephone hand-sets as well as in hundreds of other forms.

Divisions of the Plastics Field: The term "plastics products industry" refers to plants which make molded and laminated plastics articles and parts for sale. This is the largest and most distinctive of the three main divisions of what has been popularly called the field of plastics. The other divisions are plastic materials manufacturing and plastics fabricating.

Plastic materials producers, part of the chemical industry, supply molders and extruders with molding compounds in powder, granular, or flake form, and furnish laminators with impregnating resins. They also furnish sheets, rods, and tubes to fabricating plants.

Molders, laminators, and fabricators make the so-called "rigid" plastics products that the public sees and readily recognizes. Less than half of the plastics materials, however, go into these products. The rest are consumed in the making of such other products as paints and coatings, adhesives, brake linings, and grinding wheels. About 30,000 workers are employed in the plants which manufacture plastic materials, in jobs similar to those found in other chemical processes.

Plastics fabricators also make plastics products, but, unlike molding and laminating plants, are not considered part of the plastics products industry. Their production methods are basically the same as those used in woodworking and metalworking. Plastics fabricators buy plastic forms, such as sheets, rods, and tubes, from the materials producers and turn them into finished articles or parts. As many as 2,000 plants fabricate plastics, including some which also work other materials, such as wood or light metals.

¹ Of the Bureau's Occupational Outlook Division.

They range in size from one-man shops making novelties in basements and garages to a few plants with more than 100 employees. The equipment used ranges from simple hand tools, such as files, to power machines of the kind employed in machining metal or wood. Although there are many fabricating shops, the number of jobs is much lower than in the plastics products industry.

Nature of the Industry: Plants in the plastics products industry mold or laminate plastics articles for sale. Most of the industry's output consists of plastics parts made to order for firms in other industries, such as the electrical machinery, automobile, radio, aircraft, and fountain pen industries. Other plastics products are sold in finished form, such as novelties, toys, combs, and container tops. Some plants in other industries, such as automobiles and radios, have plastics departments of their own, instead of purchasing plastics parts from independent molders or laminators.

At the end of 1946, there were about 800 plants in the plastics products industry, with a total of about 50,000 employees. In the 200 to 300 plastics departments of plants in other industries, an additional 12,000 to 15,000 were employed. The jobs in these plastics departments correspond to those in the plastics products industry.

In 1945, the total output of molded and laminated plastics products (including products made outside of the plastics products industry) was valued at 330 million dollars, compared with approximately 76 million dollars in 1939.

Plastics products plants are located principally in the more important industrial regions of the country, near the main users of their products. In the first part of 1946 there were plants in about 25 States, but approximately three-fourths of the workers in the industry were employed in eight States: New York, Massachusetts, New Jersey, Illinois, Ohio, Connecticut, California, and Pennsylvania.

Plants in this industry are usually small. One factor is the relative newness of the industry; another is the ability to operate fairly small molding plants efficiently. Plants range in size from those which are run by their owners without help to a few large establishments with over 1,000 employees. In 1939 more than half of all plants had less than 50 employees. During World War II and thereafter, the older established companies

tended to become much larger. On the other hand, most of the new plants which have opened up within the last few years are still comparatively small.

How Plastics Products Are Made

Plastics products are made primarily by machines. Hand work comes in mainly in the finishing and inspection of the products. In a particular plant, one or more processes may be used, each having its special type of machine. These machines are largely automatic in their operation.

Quantity production is the rule, even in the smaller plants. Typically, large numbers of each item are turned out. A plant may have an order for many thousands of identical bottle caps or fountain-pen barrels. It is usually not economical to make plastics products in small quantities, because of the high cost of the individual molds used in their manufacture. Without mechanization and quantity production, the cost of plastics articles would be prohibitively high, and their widespread use impossible.

The principal methods of shaping plastics are by molding and laminating. There are four main ways of molding plastics—compression, transfer, injection, and extrusion. Choice of method is based on the shape of the piece to be molded and the kind of plastics materials used. In laminating, pressure is used to bond together plastic impregnated sheets of paper or fabric.

Plastics fall into two main classes: thermosetting and thermoplastic. Thermosetting materials undergo chemical change under heat and pressure, whereas thermoplastic materials do not. After molding, thermoplastics can be reheated and used over again, whereas thermosetting materials cannot be reused. Some of the most commonly used thermosetting compounds are phenol formaldehyde and melamine. Typical thermoplastic compounds include cellulose acetate, ethyl cellulose, polystyrene, acrylics, and the vinyl resins.

Compression Molding: More than half of all molded plastics, including such products as container tops, knobs and handles, instrument housings, electrical fuse boxes, and radio cabinets, are made by the compression method. A carefully

measured amount of thermosetting material, either in powder form or in preheated pellets, is loaded directly into the heated cavities of the steel mold. The mold closes and pressure is applied. Inside the mold, the material softens under heat and pressure, flows into the shape of the mold, and fuses and hardens permanently. The pressure is released, the press is opened, and the molded piece is removed.

Transfer Molding: This method is employed for molding many thermosetting plastics objects difficult to produce by conventional compression molding—especially those in which metal parts are inserted, as, for example, in many electrical devices. Transfer molding is a variation of compression molding, differing from it in that the plastic materials, instead of being loaded directly into the mold cavity, are first placed in a transfer chamber, where they are softened by heat. The material is then forced by means of a plunger into the closed mold, where it is held under pressure for the period required to harden or “cure” the piece being molded.

Injection Molding: Most of the molding of thermoplastic materials is done by the injection method, which produces such articles as combs, eyeglass frames, flashlight cases, tooth-brush handles, vacuum-cleaner attachments, instrument panels, and costume jewelry. This process is usually done by semiautomatic machines and with the use of multicavity molds, which produce many items at the same time. The plastic material is loaded into a hopper, which feeds into a cylinder. A ram forces the material into a heating chamber, where it is softened. The plastic material in semiliquid form is then forced by pressure into a cool, closed mold, and here the material hardens by cooling, and the plastics part is ejected. The entire cycle (the whole operation of changing the heated material into the finished piece) can be completed in as little time as 20 seconds.

Molding by Extrusion: This method is used to produce continuous cross sections (strips) from thermoplastic materials for such products as flexible tubing and wall moldings. Plastic material is fed into the extrusion machine, which operates much like a sausage grinder. A continuous screw forces the material into the heating chamber, where it is

softened by heat and pressure and then forced, in paste-like form, through the die opening. The strip which emerges takes the form of the die, is carried off on a conveyor, and cooled by blowers or baths. The strips are then cut into the desired lengths or wound on spools.

Finishing and Inspection: Before molded plastics products are ready to be shipped to the user, they undergo a series of hand- and machine-finishing operations. Excess material must be removed, surfaces polished, and in many cases holes must be drilled and other machining done on the plastics pieces. Frequently, pieces have to be assembled. Laminated sheets, rods, and tubes may be further shaped by sawing, machining, and punching holes.

Plastics articles are inspected for proper size, finish, color, and other specified qualities required by the user.

Laminating: Laminating is used to produce sheets and tubes of high strength and hard finish. Sheets of paper or fabric are soaked in resin solutions and squeezed together under heat and pressure. Lamination may be high pressure, low pressure, or contact, differing according to the type of pressure used. In high pressure laminating, rolls of paper or fabric are run through a bath of resin, the excess resin is drained off, and these rolls are dried in ovens. Sheets of the material are cut to proper length and placed in stacks between two steel plates. The stacks are then placed between the platens of a hydraulic press, where heat and pressure forms them into laminated sheets. The sheets are cooled and removed from the press. Any type of finish can be obtained, because the finished sheets duplicate the surface of the steel plates.

Some typical products machined from laminated sheets or tubes include automobile gears, switchboard panels, bearings, trays, and table tops.

Workers and Their Jobs

As this is a relatively new industry, and one which has added many workers in recent years, most of its employees are young. During World War II, women constituted 40 to 50 percent of the workers in plastics products plants. Since then,

the proportion has dropped to about a third. Most of the women are in the finishing and inspection departments and in office work, although they frequently operate semiautomatic molding machines.

About 5 percent of the workers in the industry are Negroes. Some Negroes are employed in production jobs, but most are employed as janitors and as laborers in the shipping and storage departments.

Types of Work: Because the production methods of the plastics products industry are largely mechanized, the bulk of the jobs are semiskilled and unskilled.

Over a fourth of the workers are in the molding departments. Almost all molding-machine operators learn their duties in a few months of on-the-job training. Hand molders (operators of non-automatic molding machines), however, are relatively skilled. Operators of fully automatic molding machines may be trained in a few weeks. In the finishing and inspection departments, which have nearly a third of the workers, semiskilled and unskilled employees do the various tumbling, sanding, assembling, and polishing operations. Similarly, much of the inspection is done by workers who need brief training. In laminating departments, as in molding, nearly all the jobs center around machine operation. Plastics products plants also employ a number of men who move materials or perform laboring jobs. These are found in the storage and shipping departments, as well as the various production and maintenance departments.

On the other hand, molding plants which make their own molds have tool rooms where highly skilled tool and die makers and machinists are employed; but tool-room jobs are only a small percentage of employment. There are also a number of workers who maintain the plant and its equipment, among them being some skilled men, such as electricians and mechanics.

White-collar workers constitute nearly 14 percent of the industry's total employment. There are, of course, the usual clerical jobs, such as typing, bookkeeping, and filing. Many salesmen are employed in the marketing of plastics products. In the technical field, there are chemical and electrical engineers, mold and product designers, and draftsmen.

Earnings: Hourly earnings of plant workers in this industry range from an entrance rate of 50 to 60 cents an hour for some unskilled finishing jobs to more than \$2 an hour for especially skilled tool and die makers. A high percentage of the workers are on incentive pay, with a guaranteed minimum hourly rate. The average hourly earnings of production workers employed in 124 plants reporting to the Bureau of Labor Statistics in May 1947 were about \$1.19. On the average, they earned \$48.80 a week, for 41 hours of work. This compares with hourly earnings of \$1.21 and weekly earnings of \$48.46 for production workers in manufacturing industries as a whole in the same month. These figures include extra pay for overtime, holiday work, and night shifts, and therefore do not show the straight-time pay. Typical straight-time earnings in the early part of 1947 for experienced workers in each of the main occupations of the plastics products industry are shown in the following tabulation:

	<i>Straight-time hourly earnings</i>
Tool and die makers.....	\$1. 30- \$2. 00
Machinists.....	1. 10- 1. 75
Set-up men, molding machines.	1. 00- 1. 50
Molding machines operators, male.....	. 90- 1. 50
Molding machine operators, female.....	. 75- 1. 35
Laminating department work- ers, semiskilled.....	. 80- 1. 25
Finishing room workers.....	. 65- 1. 10
Inspectors.....	. 60- 1. 00

This industry does not have seasonal ups and downs in production, so that nearly all its employees work the year round.

Working Conditions: Working conditions in plastics products plants are usually good, compared with factory work in general. The buildings are often modern, well-lighted, and adequately ventilated. Molding departments tend to be noisy, and it may be quite hot next to the molding machines. The operators have to wear gloves, since they handle hot plastics pieces. In laminating plants, the odor from the laminating solution may be disagreeable, and heat near the presses may be bothersome.

The work in the industry is not particularly dangerous. Accident data for 1946 indicate that in this industry there were about 16.8 disabling injuries for each million employee hours

worked, compared with a rate of 19.9 for all manufacturing industries. The machines used in molding are largely automatic, with numerous safety devices to reduce the hazards. In finishing operations, cutting and stamping machines cause occasional injuries, and the workers may be affected by dust from grinding and polishing.

Most plastics products plants operate more than 1 shift; 3-shift operation is the most common.

About half of the plants in the industry are unionized. Locals of various CIO and AFL unions and some independent unions have organized these plants.

Past Trends in Production and Employment.

Since the beginning of the industry in 1869, with the invention of the first plastic material—celluloid—there has been continued expansion both in the amounts and types of materials made and in the production and uses of plastic products. In recent years, however, growth has been phenomenally rapid, as shown in the following table of plastics products output:

	Value ¹
1931.....	\$20, 900, 000
1935.....	38, 300, 000
1937.....	67, 700, 000
1939.....	76, 100, 000
1943.....	261, 000, 000
1944.....	306, 000, 000
1945.....	330, 000, 000

¹ The value of output includes plastics products made in plastics departments of plants in other industries, as well as in the plastics products industry.

Data for 1931-39 are from the Census of Manufactures; for 1943-45, from the Civilian Production Administration.

In 1939, output was nearly four times that in 1931. The rise between 1937 and 1939 is also significant, in view of the fact that general business conditions were better in the former year than in the latter. There were many factors in this rapid growth: New plastic materials were developed; the cost of materials decreased; the methods of molding and laminating were greatly improved; widespread consumer and industrial acceptance of plastics was achieved.

During World War II there was another great expansion of the industry, with 85 percent of plastics products going directly or indirectly into military uses. These included, for example, parts for hand grenades and gas masks; housings for

radio and radar equipment; aircraft ammunition boxes and bomb racks; and laminated plastics bearings and gears. In 1944, production had risen to four times the prewar rate.

Not only did wartime needs greatly expand the production of plastics products, but there were also other effects important in the peacetime development of the industry. Numerous substitutions were made of plastics in place of metal and other scarce materials; and many plastics materials were improved in connection with military uses. These developments were carried over into the postwar period.

In the plastics products industry, the number of employees doubled between 1939 and 1943, and continued to rise during the war years. Employment did not go up nearly as much as production, however, because lengthening of working hours and use of improved production equipment and methods resulted in a great increase in output per worker. Estimates of wage and salary worker employment are shown below.

	Estimated employment ¹
1937.....	16, 900
1939.....	18, 000
1943.....	36, 800
1944.....	37, 700
1945.....	42, 000
1946 (Dec.).....	50 000

¹ Derived from published and unpublished data of the Bureau of Employment Security (Social Security Administration), and of the Bureau of Labor Statistics, and from the 1939 Census of Manufactures.

The outstanding feature of this industry's development is the fact that employment at the end of 1946 was above the wartime peak, as well as nearly three times the 1939 level. What happened was that a big increase in peacetime uses of plastics products more than took the place of their wartime uses.

During 1946, plastics molding firms reported demands for their products two to three times as great as the amount of plastic materials they could obtain, even though production of such materials was at an all-time high. If it had not been for a severe shortage of plastic materials, an even greater postwar increase of the industry would have occurred. Many plants had to close down for short periods, or at least curtail production for lack of materials.

Since the spring of 1947, there has been a slackening in the demand for many products

made from thermoplastics, resulting in some small lay-offs in the industry. This situation, it is believed, is purely temporary, and reflects an oversupply of plastics novelties and gadgets, and, in some cases, buyers' resistance to high prices and improper uses of plastics. Demand for products made from thermosetting materials has remained strong, on the other hand, and the supply of these materials has continued to be inadequate.

Since the materials shortage has been a limiting factor in the industry's recent development, the prospective supply of materials is very important in the industry outlook.

Production Prospects

Supplies of Materials: Scarcity of plastic materials developed because the expanding needs of the plastics products makers outran the capacity of the plastic materials manufacturers. Not only have there been shortages while new plants for making materials were being constructed, but there has also been a scarcity of many of the basic chemicals used in the manufacture of these materials. A much larger supply of plastic materials, however, is in prospect.

The plastic materials manufacturers in 1946 began a large scale program of new plant construction to be completed in 1948. Many of the necessary basic chemicals are also likely to be more plentiful. According to estimates of the Plastic Materials Manufacturers Association, the rate of production for all plastic materials after completion of the present expansion program will be double that of 1945, and the rate for molding powder (excluding vinyls) will be more than two and a half times the 1945 rate. By the spring of 1947, this expansion had already greatly increased the supply of thermoplastic materials, so that they were relatively abundant.

Machine Capacity: It is expected that the plastics products industry will have adequate machine capacity to absorb the increased supply of plastic materials. The number of machines installed has grown faster than the supply of materials, so that many machines are not now being fully used. Moreover, figures on the number of machines in use in recent years show a rising trend in capacity.

Type of machine: ¹	1941	1944	1945	1946
Injection.....	1,000	1,450	1,720	3,275
Compression.....	8,000	11,500	12,065	12,975

¹ Data are from Modern Plastics (New York, N. Y.), January 1947. These estimates include machines used in plastics departments of plants in other industries, as well as in the plastics products industry. They do not include laboratory presses nor make allowance for scrapping of older machines.

Some additional increase in the number of machines seems certain for 1947. It appears likely, then, that there will be enough molding machines to use all the increased supply of plastic molding material. The extent to which this capacity is used in actual production, however, depends on the prospective markets for plastics products.

Markets for Plastics Products: Only a small percentage of plastics products are sold directly to the public as finished articles, such as toy guns, sink strainers, and combs. Most of the products go to manufacturers who use plastics parts in the making of other products, such as radios, automobiles, fountain pens, and industrial machinery. Thus, the demand for plastics products and the resulting volume of production that can be expected for the next few years will be determined primarily by the level of activity in the industries which consume plastics products and by the development of new uses for plastics by these industries. The most important industrial users of plastics products include the manufacturers of electrical machinery (both industrial electrical equipment and consumer appliances), radios, automobiles, novelties and toys, aircraft, household equipment and furniture, industrial machinery and equipment, packaging, and building supplies. A high level of activity is expected in most of these industries for the next few years.

The electrical equipment industry constituted the largest prewar market for plastics products. In view of the recent large increase in demand for electric power in this country and of foreign needs for electric-power machinery, the production of generating and distributing equipment is expected to be at an all-time high during the next few years. Because of their excellent insulating qualities, laminated and molded plastics parts are being increasingly used in this equipment in such applications as junction boxes, circuit breakers, panel boards, fuses, bases for electric motors, and meter boards.

In the next few years, there should continue to be a high volume of production of refrigerators, vacuum sweepers, and the many other electrical appliances. This should provide a good market for plastics parts. The growing use of electronic devices will expand another market for plastics.

The output of radio receiving sets in 1946 was an all-time record, and is expected to remain at a high level for a few more years. Apart from their other uses in radios, plastics have replaced wood largely as cabinets for table models. The probable growth of FM and television will create some additional demand for plastics products, which are used in both the transmitting and receiving equipment.

Although the automobile industry was one of the heaviest consumers of plastics before the war, the average automobile contained only about 5 pounds of plastics. The first postwar cars showed no important changes in the amounts of plastics used. Increased use of plastics parts is forecast, however, and some experts predict the use of as much as 15 to 20 pounds of plastics per car. Already an important application of plastics in the postwar automobile has been announced by one company: the entire inside surface of a new station wagon consists of laminated paneling. Not only are more plastics per car likely, but also a high level of automotive output—at least 5 million cars and trucks annually—may be expected for the next few years.

The aircraft industry was one of the largest users of plastics during the war. Although current aircraft production is only a small fraction of the wartime rate, it remains considerably higher than the prewar volume. With the probable growth of peacetime aviation and with the many new applications of plastics in aircraft, this industry should continue to be an important market for plastics products.

Another important use for plastics products has been as tops for bottles and other containers. In the past, the bulk of the closures have been metal, but plastics, because they are odorless, tasteless, nonrusting, and resistant to chemicals, are expected to be much more widely used in the future.

In other important plastics-products-consuming industries—the building, household-equipment and furniture, and novelty and toy industries—production is expected to be at a high level for several

years, with some new uses of plastics also being introduced. Already plastics have appeared in many new uses in buildings and furniture, and the trend to plastics is growing. An example is the recent development of plastic bathroom tile. A visit to any 5-and-10-cent store will show that numerous familiar items, such as tool handles and towel racks, formerly made of other materials, are now often plastic.

Production Outlook: All in all, market prospects for plastic products appear highly favorable, provided general business conditions continue to be good. It seems entirely possible that in 1949 the industry, together with the plastics departments of plants in other industries, will be using all or nearly all of the increased supply of materials expected to be available at that time. This would mean a rate of output of plastics products as much as 75 percent higher than in the latter part of 1946, itself a record period. This increase will not be achieved, however, unless the use of plastics products is intensively promoted. The rise in the output of the industry might vary somewhat from the estimate of 75 percent, depending on how much of the expanded production occurs in the plastics departments of plants in other industries. There are some indications that such departments may grow more rapidly than the independent industry.

The demand for plastics products over a longer period—for example the 5-to-10-year period beginning about 1950—will depend not only on the rate of production of the present users of plastics, but also to an increasingly important extent on new applications by these and other industries.

After a few years, the demand for plastics products for use in the electrical appliance and radio industries will probably decline somewhat. Nevertheless, these industries, as well as other major consumers of plastics products, such as the automobile industry, are expected to continue at relatively high levels of production.

Further growth of the plastics products industry, however, will depend mainly on the new uses that will be developed. As has previously been indicated, many of the present industrial consumers expect to develop new uses for plastics parts in their products. This is especially true in the construction, automobile, railroad-equipment, and household-equipment industries. Some of the

new applications of plastics, which have been deferred because of the shortage of materials, will come on the market within the next few years. Moreover, extensive research is continually in progress in an effort to find additional uses for plastics products and to develop new plastic materials with properties which will create new fields for plastics.

Prices of plastics products are especially important in the long-range outlook. For some time there has been a downward trend in the prices of plastic materials, especially in the newer materials, such as polystyrene. Plastics prices, as a whole, are still high compared with other materials, and, as a result, many important markets are closed to plastics products. As the production of the different plastic materials increases, however, some further price reductions are probable. Costs of making plastics products may also decline because of the increased efficiency of the newer machinery and methods. Wider use of new methods, such as low-pressure molding, may open up some new markets for plastics because these processes can produce larger and more intricate shapes.

To sum up, it seems likely that with development of new markets for plastics products, and with continued growth of population and national income, a long-range upward trend in the volume of output is in prospect. This growth, however, will probably be much less rapid than the rate of increase expected to occur in the next few years.

Prospective Technological Changes

In order to estimate from the anticipated volume of output how many workers will be employed in the industry, it is necessary to consider prospective technological changes which affect the quantity each worker can produce.

The use of new equipment will considerably increase output per worker. A number of new machines were delivered to the industry in 1946, with greater efficiency than that of older types. For instance, almost all the new injection-molding machines delivered in 1946 had a capacity of 8 ounces or more, whereas only about a third of such machines in use at the end of 1945 were that large. Moreover, a high proportion of the new equipment consisted of injection-molding machines, which are faster than the more widely used compression machines.

It is also possible that the average order received by molding plants will be larger in the future, so that the plant will be able to make longer production runs with less time out for changing molds and materials. The end of the shortages of materials will also permit more efficient operations. Moreover, as the industry develops and as competition among plants becomes keener, the tendency will be for the least efficient plants to close down. Higher output per man in the industry as a whole will result.

Other technological changes that will affect employment include increased use of the faster transfer-molding method and further application of electronic preheating of molding preforms, which has speeded up compression molding.

Partly offsetting technical advances will be the probable reduction of the workweek. In the first part of 1947, many plastics products workers were on a 44- or 48-hour week. The tendency will be to cut their hours to around 40.

All in all, since machinery and processes are continually improving, output per worker in the plastics products industry will rise considerably; employment, therefore, is not expected to increase as rapidly as production.

Employment Outlook

Taking into account the prospects in production, and allowing for the probable effects of technological change, it would appear that a sharp increase in the number of workers in the plastics products industry is in store for the next few years. In 1949, if the demand for plastic products is then as great as expected, the number employed in the industry may reach 75,000—an increase of 25,000 over employment at the end of 1946. Added to these new jobs will be the openings created in the replacement of those workers who die or retire, or who leave the industry for one reason or another. Also, plastics molding and laminating departments of plants in other industries will hire additional workers, and this will have the same general effect on employment opportunities for plastics workers as the expansion of the industry.

Looking further into the future, the prospects are for a continued, but gradual, rise in employment. This is important, because it means that those entering the industry during the next few

years will have good chances of continued employment over a long period.

It must be remembered, however, that the plastics products industry will be relatively small, even after the anticipated expansion. Normal replacement needs of each of such large industries as automobiles, cotton textiles, or iron and steel will create more job opportunities each year than the combination of new jobs and replacements in the plastics products industry.

Future opportunities in the plastics products industry cannot be measured solely by the number of jobs; the types of work are of equal importance. The fact is that most of the openings will be for inexperienced persons, who will be trained on the job for semiskilled or unskilled production jobs in the molding and laminating plants. Earnings, however, are about equal to those in manufacturing industries as a whole, and

the working conditions are generally satisfactory. The long-run growth of the industry will improve the chances for promotion to better jobs.

In addition, there will be some openings for apprentices to be trained for skilled jobs in the tool rooms. There also will be vacancies for office and maintenance help. A small number of persons with engineering training will be hired for such positions as production engineer and mold and product designer. Some men will be hired as salesmen—one of the better paying and more interesting positions. Selling jobs, however, will still be only a small part of the industry's employment.

In recent years, many men have opened up small molding plants. There will continue to be some opportunities of this kind, but only for those who have adequate capital and a thorough knowledge of plastics production and marketing.

Working Conditions of Public-Health Nurses

LILY MARY DAVID¹

INCREASED EMPHASIS on preventive medicine and health education has increased employment opportunities in the field of public-health nursing. The number of nurses so employed has grown from 130 in 1901 to over 20,000, or about one-twelfth of all professional nurses in the United States, thus ranking next to institutional and private duty work. The survey of registered professional nurses conducted in the early months of 1947 by the U. S. Bureau of Labor Statistics in cooperation with the U. S. Women's Bureau and the National Nursing Council, obtained information on the salaries, working hours, working conditions, and job attitudes of about 1,350 public-health nurses.² Nurses employed by local, State, and Federal public health agencies, as well as by nongovernmental agencies such as visiting nurse and tuberculosis associations, participated in the study. Some highlights of the information they furnished are summarized here.³

Earnings, Hours, and Professional Expenses⁴

General Salary Levels: On the average, public-health nurses earned \$184 a month in October

¹ Of the Wage Analysis Branch.

² These comprise over 6 percent of all nurses in this field and more than half of the public-health nurses who received the questionnaire used in the study.

³ Information regarding other fields of nursing, as well as the methods used in the survey, is given in the MONTHLY LABOR REVIEW for July (p. 20). More detailed data from this study are available in the September issue of the American Journal of Nursing, and also will be incorporated in the final report on the study to be published by the Bureau of Labor Statistics.

⁴ Earnings include cash paid in lieu of maintenance but exclude the cash equivalent of maintenance and payments for transportation provided by the employer. Hours exclude formal meal periods. Averages used are medians (the values below and above which half of the replies fall). Data on earnings and hours are for October 1946; professional expenses cover the entire year 1946.

1946, as compared with \$170 to \$175 for all professional nurses combined. Earnings exceeded those for institutional, office, and private-duty nurses but were less than for nurse educators and industrial nurses. A fourth of the public-health nurses earned \$160 a month (\$37 a week) or less and another fourth earned at least \$215 (\$50 a week). Average hourly earnings amounted to \$1.08 in October 1946.⁵

Hours of work: The work schedule for the majority of nurses did not exceed 8 hours a day and 40 hours a week; schedules of fewer than 8 hours a day and 40 hours a week were reported by half of the school nurses and one-third of the other public health nurses. Actual, as contrasted with scheduled, hours on duty averaged about 40 a week (175 a month) during October 1946, as compared with a 44-hour average for all nurses. Evidence of some overtime is found in the fact that, although schedules in excess of 44 hours a week were uncommon, about 1 in 10 public health nurses worked from 45 to 49 hours and 1 in 20 worked over 50 hours. Half of those who participated in the study stated they seldom work overtime. Of those who do work overtime, about 3 out of 5 receive some compensation for this work, generally in the form of time off.

About 3 out of 10 nurses reported that they were required to be on call for some time in addition to their regular hours on duty. Typically, they were on call for less than 20 hours and actually worked less than 10 hours during on-call time in October 1946. The figures on actual hours worked, given in the preceding paragraph, include duty during on-call time.

Variations in Hours and Earnings: The highest average earnings (\$221 a month and \$1.28 an hour) were reported on the Pacific Coast; New England nurses reported the lowest monthly earnings (\$164), while the lowest hourly earnings (94-96 cents) were found in New England, the Southeast, the Middle West, and the Southwest. The shortest workweek, about 40 hours, was reported in the Middle Atlantic, Border, Mountain,

⁵ These average hourly earnings were obtained by dividing the monthly earnings of individual nurses by their monthly hours and then obtaining an average (median). The result is slightly different from that which would be obtained by dividing average monthly earnings of all nurses by average monthly hours.

and Pacific regions, and the longest, about 43 hours, in the Middle West and Southwest.*

Nurses in cities of 500,000 or more population received higher salaries than those in smaller communities, but otherwise there appeared to be no consistent variation in earnings with size of community. Among employers of public health nurses, the Federal Government paid the highest average salary in October 1946—\$218 a month, or \$50 for a 40-hour week. Salaries paid by State and local government agencies did not vary widely, averaging from \$185 to \$190 a month, while those paid by private agencies averaged about \$180 a month. The longest duty periods were reported by nurses employed by county governments, and the shortest, by employees of the Federal and municipal governments.

Monthly earnings tended to increase with experience and age. Nurses who obtained their basic nursing education as part of a 4- or 5-year college course, and those who had 60 or more graduate college credits, earned more on the average than other public-health nurses. Earnings did not appear to be affected by size of the hospital in which the basic nursing education was received.

Professional expenses: During 1946, public-health nurses averaged \$83 for professional expenses. These included membership in professional organizations; State registry fees; payments to nurses' placement registries; professional equipment; uniforms (laundered, cleaned, and purchased); and expenses of transportation during working hours.

Vacations, Sick Leave, and Insurance Plans

Almost all nurses in public-health work received paid vacations and sick leave after a year's service. Two weeks was the most common limit on sick leave, while vacations of 2 weeks and of 4 weeks or more were about equally frequent.

* The grouping of States by region was as follows: *New England*—Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont; *Middle Atlantic*—New Jersey, New York, and Pennsylvania; *Border States*—Delaware, District of Columbia, Kentucky, Maryland, Virginia, and West Virginia; *Southeast*—Alabama, Florida, Georgia, Mississippi, North Carolina, South Carolina, and Tennessee; *Great Lakes*—Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin; *Middle West*—Iowa, Kansas, Missouri, Nebraska, North Dakota, and South Dakota; *Southwest*—Arkansas, Louisiana, Oklahoma, and Texas; *Mountain*—Arizona, Colorado, Idaho, Montana, New Mexico, Utah, and Wyoming; *Pacific*—California, Nevada, Oregon, and Washington.

About 2 out of 5 nurses were covered by retirement pension plans participated in by their employers; as indicated under the head of opinions, lack of provision for retirement was a major source of dissatisfaction. Only 1 in 6 received hospitalization, medical care, or periodic physical examinations in addition to basic salaries.

Nurses working for the Federal Government received the most sick leave and the longest vacations, and they are covered by a retirement pension plan. Nongovernmental agencies provided retirement pension plans more frequently than county or State governments, and gave longer vacations and sick leave than any other agencies except the Federal Government. Private agencies provided accident, health, and life insurance, as well as hospitalization and medical care, more frequently than any type of government agency.

Opinions

Public-health nurses expressed less dissatisfaction with their work than nurse educators or private duty or institutional nurses, and were about as well satisfied as industrial and office (doctors' and dentists') nurses. Dissatisfaction was largely concentrated on rates of pay, methods of awarding pay increases, limited opportunity for promotion, and lack of provision for retirement and for security against unemployment, also the leading sources of dissatisfaction in other branches of the profession. About 1 out of 3 respondents expressed dissatisfaction on these points. One out of 5 was dissatisfied with methods of settling grievances and made suggestions for changes in procedures. Considering each of the other aspects of their work separately, less than 1 out of 5 expressed dissatisfaction and in most cases the proportion did not exceed 1 in 10.

Nurses employed by the Federal Government were generally more satisfied, and those employed by county and municipal governments were less satisfied, than other public health nurses. Amount of education and years of experience apparently had no consistent influence on opinions; however, the proportion who were neither definitely satisfied nor definitely dissatisfied tended to be higher among nurses with long experience than among those who had been engaged in nursing for a comparatively short period.

Summaries of Special Reports

Prices in the Second Quarter of 1947

IN GENERAL, prices in the second quarter of 1947 were slightly below the high levels of the first quarter. Steady but small declines during April and early May followed President Truman's pleas to business for general price reduction. However, rises occurred in late May and June, and consumers' prices in mid-June reached an all-time peak—0.5 percent higher than in March. Developments in late June and early July, such as prospects for continued heavy exports for foreign relief and the substantial wage increase in the coal industry, gave little promise of a downward trend.

Consumers' prices decreased fractionally from March to May but increased 0.7 percent from mid-May to mid-June, largely because of sharp advances in meat prices.

General primary market prices over the quarter declined 1.0 percent. The Bureau's sensitive daily index of 28 commodities fluctuated over a narrow range after mid-May at about 300 percent of the August 1939 average (compared with a peak of 338.3 reached March 17, 1947).

The narrowness of fluctuations in average prices did not indicate general stability but rather a counterbalance of diverse movements for different commodity groups. The quarter was one of apparent surface stability at high levels of business activity, with strong conflicting undertones which led to widely differing and changing viewpoints in regard to probable future trends.

It seemed significant that price reductions were not confined to agricultural commodities. A few retail stores throughout the country announced general price cuts. Lower prices were reported for certain commodity groups which had remained stable or had been increasing for an extended period. Thus, in May, average retail prices of housefurnishing goods decreased for the first time since early 1945 (over 2 years earlier), and primary

market prices of building materials declined for the first time in over 4 years.

Certain other developments besides the movement of commodity prices suggested the beginning of a business recession. Buyers' resistance to high prices was reflected in a disappointing volume of new construction and in a decline in prices of real estate, particularly the more expensive homes. Industrial production and the level of nonagricultural employment dropped slightly, but the declines were evidently temporary, owing to reductions in a few industries, as in steel (because of work stoppage in April in the coal industry) and in textiles and apparel (partly seasonal).

Contending deflationary and inflationary forces were evident during the period. Chief among deflationary factors was the gradual filling up of distribution pipe lines, particularly for consumer goods, and the decline in prospective expenditures for new plant and equipment. Inventory accumulation was below the level of the first quarter. Earlier estimates of construction expenditures for 1947 were scaled downward from about 15 billion to about 12 billion dollars. Consumers' accumulated savings were being reduced and the rate of current savings was much less than in 1946. The excess of government income over expenditures represented a withdrawal of consumer spending power. Supplies of most apparel were adequate, and many durable goods were available in larger quantities. These factors made demand more discriminating and increased buyers' resistance to high prices for inferior-quality goods. Thus, prices of off-brand radios and small electrical appliances were generally reduced to clear stocks. The decline in total shoe production has been attributed to consumer demand for better quality at a reasonable price. A general expectation of lower prices was indicated by the wide premiums on spot sales over futures in most commodity markets.

On the other hand, the economic situation contained many elements of an inflationary

character. National income and consumer expenditures remained high. Income payments to individuals in April and May were at an annual rate of approximately 177 billion dollars—about the same as in the first quarter of 1947 and 7 percent higher than the total for 1946. As a result the volume of retail trade was maintained close to first-quarter peaks. Indexes of department-store sales, seasonally adjusted, exceeded the first quarter and approximated the August 1946 peak. The increase in retail sales was accompanied by an expansion of consumer credit. At the end of April the amount outstanding stood at 10.3 million dollars, the highest level on record; it advanced to 10.7 million by the end of May. Average weekly earnings in manufacturing industries continued to advance, reaching an all-time high of \$48.86 in May, reflecting increases in wage rates, particularly in durable-goods industries, and slightly longer working hours.

Important for its influence on prices was the emphasis on needs for foreign relief and rehabilitation, particularly for agricultural goods, and the possibility of further demands under the "Marshall plan." Exports in May reached a record peacetime volume of 1.4 billion dollars, not including shipments to United States armed forces abroad. This was larger than total exports, including lend-lease, during any month of the war

except May 1944, just prior to the Normandy invasion.

The expansion of exports has not been matched by a like expansion of imports. This has resulted in a serious depletion of dollar credits available to foreign countries for further purchase of American goods. Imports for consumption in April and May were somewhat higher than in the preceding 2 months, but amounted to only about one-third the dollar value of exports. The lag in imports has been attributed to unavailability of goods in foreign countries and also to reduced demand because of a general expectation of lower prices.

Farm Products and Foods

At the close of the second quarter of 1947, primary market prices for farm products were approximately 2½ percent, and foods 4 percent, below the record levels attained in March. Declines during April and May were followed by advances of more than 1 percent in June, as unusually strong consumer demand resulted from record employment, a large, well-dispersed national income, and cool-weather appetites. Retail food prices rose to new all-time highs in June, averaging ½ percent above the peak reached in March, primarily as a result of sudden advances in red-meat prices. After June 1946, the last month of extensive Government price controls, primary

TABLE 1.—Percent change in consumers' prices and in primary market prices, in specified periods¹

Commodity group	Percent change—					
	In last quarter, March 1947 to June 1947	In last 6 months, December 1946 to June 1947	In last year, June 1946 to January or June 1947	From wage-base date, January 1941 to June 1947	From month before final decontrol, October 1946 to June 1947	From month before war in Europe, August 1939 to June 1947
Consumers' prices: All items.....	+0.5	+2.5	+17.9	+55.9	+5.7	+59.3
Food.....	+5	+2.5	+30.8	+95.2	+5.8	+103.7
Clothing.....	+8	+5.2	+18.1	+83.5	+10.5	+85.1
Rent.....	+2	+6	+4.0	+4.7
Fuel, electricity, and ice.....	+1	+1.9	+6.5	+16.8	+2.9	+20.7
Gas and electricity.....	-.5	-.3	-.4	-5.9	+1	-7.4
Other fuels and ice.....	+4	+3.4	+11.4	+37.5	+4.7	+48.5
Housefurnishings.....	+2	+3.1	+17.0	+82.2	+8.4	+81.5
Miscellaneous.....	+7	+2.2	+8.8	+36.6	+6.2	+38.5
Primary market prices: All commodities.....	-1.0	+5.0	+31.1	+183.2	+10.4	+97.3
Farm products.....	-2.6	+5.8	+27.0	+148.5	+7.6	+191.6
Foods.....	-3.5	+1.1	+43.3	+119.5	+2.5	+140.8
Hides and leather products.....	-.8	-2.0	+41.5	+69.1	+21.6	+86.8
Textile products.....	-.5	+3.1	+27.2	+84.7	+8.0	+104.9
Housefurnishing goods.....	+2.7	+7.5	+17.0	+45.2	+12.1	+50.9
Fuel and lighting materials.....	+3.2	+8.1	+18.3	+44.1	+10.3	+43.1
Metals and metal products.....	+1.9	+5.9	+27.1	+46.0	+13.4	+53.0
Building materials.....	-1.3	+11.0	+34.9	+75.9	+30.0	+95.5
Chemicals and allied products.....	-9.1	-4.4	+24.7	+52.9	+20.3	+62.0
Miscellaneous commodities.....	+4	+6.3	+17.6	+50.2	+11.3	+58.0
All commodities, except farm products and foods.....	+7	+5.9	+25.0	+66.6	+14.0	+64.8

¹ In comparing retail and primary market price movements, the following differences between the consumers' price and primary market price indexes must be noted: The primary market index is based on prices of selected representative commodities of constant specifications. The consumers'

price index is based on prices of selected goods and services purchased by moderate-income families in large cities, and reflects in part the effect of disappearance of lower-priced articles.

market prices of farm products and foods advanced 27 percent and 43 percent, respectively, while retail food prices rose 31 percent.

Primary market prices of livestock, dairy products, and fats and oils declined over the quarter, but fruits and vegetables, eggs, grains and meats advanced. As retail prices of meats, cereals and bakery products, eggs, and fresh fruits, and vegetables increased, those for fats and oils and dairy products decreased.

Unfavorable weather, especially east of the Rockies, was a major price determinant. Rain, cold snaps, frost, and more rain, damaged crops and retarded planting in April and May. Rains during the first half of June, culminating in extensive mid-western floods, further marred corn and other crop prospects. Grain prices advanced to the highest levels since June 1920. Prospects for a record United States wheat crop of 1.4 billion bushels, 24 percent above last year's yield, were counterbalanced by prospects for a corn crop of only 2.6 billion bushels, 21 percent below last year's. As a result, winter wheat prices in June were 10 percent below, and corn prices were 21 percent above, those of March.

The decline in wheat prices started in April, when the Government withdrew temporarily from the cash wheat market. In mid-May, prices advanced when the President ordered the immediate exportation of wheat to end food strikes in Germany, but prices declined again as the result of usual seasonal adjustments to new crop conditions and reports of a record-breaking winter-wheat crop. Unusually large farm stocks on April 1 and forecasts of a near-record crop tempered price advances for corn during April and May; but the continued high demand for domestic and export requirements, combined with rising apprehension over crop damage, caused corn prices to climb more than 17 percent from May to June. During the first 3 weeks in June, the spot price of No. 3 yellow corn at Chicago advanced 16 percent from \$1.910 to \$2.229 per bushel—nearly 6 cents above the previous peak of May 1920—while quotations for July futures on June 20 exceeded \$2.00 for the first time in history. Prices of barley and oats also increased during the quarter.

Wholesale prices of cereals and bakery products decreased 1.6 percent in both May and June—

the first declines in many months. Lower flour prices resulted from bakers' slow buying in anticipation of lower prices with new wheat supplies. Retail prices of cereals and bakery products continued the steady advance begun in December 1945, largely reflecting higher bread prices to cover earlier increases in wholesale flour prices.

Livestock prices dropped 8 percent in April, when cattle receipts were very heavy and hogs marketed averaged 266 pounds, the heaviest on record for the month of April. Fractional advances in June, with continuing strong demand for domestic consumption and for export, resulted in lowering the net decline to about 7 percent during the quarter, but prices were still 46 percent higher than in June 1946.

A 5-percent drop in wholesale meat prices in April, reflecting lower livestock prices, was offset by advances in May and June. Heavy consumer demand with near-record per capita consumption caused a sudden jump of 6 percent in retail prices of red meat early in June (a 5-percent increase over the quarter) which served to strengthen meat and livestock prices in primary markets.

Additional factors which contributed toward increasing livestock and meat prices included higher feed prices, anticipation of lower pork supplies from a relatively small autumn pig crop, and the unusually small number of lambs available for shipment. Comparing June 1947 with June 1946 prices, housewives paid an average of 74.2 cents against 37.5 cents a pound for pork chops, 78.0 cents against 41.7 cents a pound for round steak, and 84.2 cents compared with 45.2 cents a pound for veal cutlets.

Prices of fats and oils dropped, with declines at wholesale ranging from about 8 percent for oleomargarine to 42 percent for lard and 53 percent for edible tallow. Declines at retail averaged 14 percent, as lard prices fell 26 percent from April to May and an additional 9 percent from May to June. The marketing of unusually heavy hogs brought the yield of lard per hog to the high level of the 1920's and materially increased the production of animal fats. In May 1947, production of federally inspected lard was 35 percent higher than in May 1946, which increased factory and warehouse stocks. In addition, this year's heavy imports of copra and tung oil eased demands for domestic fats and oils, both edible and inedible.

Fruit and vegetable prices as a group, both wholesale and retail, advanced nearly 3 percent during the quarter, because of higher prices for fresh produce. Unfavorable weather was chiefly responsible for lower production of vegetables this spring; the estimates for many crops were placed at 25 percent under last year's. Wholesale prices of potatoes rose 11 percent at Chicago and 35 percent at Boston—considerably more than seasonally, as the new crop fell a third below last year's. Prices of most canned and dried fruits and vegetables declined steadily from March to June.

With the approach of the flush milk-production season, prices of dairy products declined steadily until mid-June—11 percent at wholesale and 8 percent at retail levels—more than usual for this season. Significantly, lower fluid milk and cream consumption in recent months diverted considerable quantities to the production of butter, evaporated milk, and cheese. Between March and June, the average retail price of butter dropped 15 percent—from 82.9 to 70.7 cents a pound. Egg prices increased seasonally, with continued strong consumer demand and abnormally low storage holdings. Coffee prices declined for the first time in many months—about 10 percent at wholesale during the quarter and over 3 percent at retail. Sugar, removed from rationing, increased slightly in price in accordance with the Cuban sugar agreement.

Textile and Leather Products

Primary market prices of textile products declined during the second quarter from the postwar peak in March 1947. Quotations for raw silk were lower and declines occurred in spot market prices of some cotton fabrics. Raw cotton and raw wool prices increased.

The cost to moderate-income families living in metropolitan areas of clothing and wardrobe upkeep rose 0.8 percent from March to June 1947, reaching the highest level since December 1920 (79.8 percent above June 1941); compared to June 1946, costs were 18.1 percent higher.

During the second quarter of 1947, supplies of most essential textile articles were greatly improved. Some wartime and postwar scarce items, such as percale yard goods, sheets, towels, men's underwear, work clothing, and women's

hosiery, had virtually ended. Supplies of nationally advertised broadcloth shirts, men's worsted suits, popular priced pajamas, diapers, and rayon crepe dress goods, although improved since March 1947, were still short of consumer demand in most cities surveyed.

In the transition to competitive selling, manufacturers of nearly every type of apparel tried to utilize better materials and more careful workmanship. Shoes, women's dresses, men's work clothing, and textile furnishings showed some improvement in quality, but in many lines of cotton and leather goods, prewar standards had not been entirely regained.

Raw-cotton quotations in June averaged 6 percent higher in 10 spot markets than in March 1947, as middling-cotton stocks for immediate delivery declined to the lowest point in many years because of previous heavy mill consumption and an unusually small cotton crop last season. Exports of raw cotton as well as cotton fabrics added support to prices. The reduction of the export subsidy from $2\frac{1}{2}$ to $\frac{1}{2}$ cent a pound in May failed to depress raw-cotton markets.

The mild recession in spot quotations for some cotton products such as narrow sheetings, print cloths, toweling, and coarse yarns occurred chiefly in April and the first half of May, as inventories mounted and the outlook for sustained cotton-goods prices seemed unfavorable. The Newburyport plan and similar efforts of retailers to reduce prices appeared to result in only a few downward adjustments of manufacturers' quotations for cotton-textile products. Rising prices were reported for the finer yarns and a number of finished cotton-goods products—wide sheeting, muslin, sateen, and percale—owing to the strong demand for these fabrics.

Prices of one grade of Japanese raw silk declined as much as 16 percent and quotations for less desirable qualities edged downward very slightly. Since July 1946, quotations for 13/15-denier D grade of Japanese white silk declined 44 percent in order to compete more successfully with rayon and nylon.

Primary market prices of rayon yarn and fiber remained unchanged throughout the quarter, but resales of 150-denier yarn were reported to have been made in June at more than double the producers' quotations. A prolonged strike at a large

acetate rayon plant appreciably decreased the supply of yarn for fabrics.

Prices of popular rayon grey goods such as plied crepes, twills, and pigment taffetas remained firm throughout the period, but those of rayon jerseys and some spun rayons of seasonal popularity moved downward after Easter. A break in other rayon fabric prices which threatened in April, when dress cutters released excess fabric inventories, did not materialize because of yarn shortages and renewed demand from dress manufacturers.

Raw-wool quotations advanced less than 4 percent following an increase in parity in April. Stocks of raw wool continued ample. Bradford yarns rose 2 percent, while mill quotations for men's worsted suitings and women's coat fabrics advanced less than 5 percent in April.

Retail prices of men's suits and topcoats rose further this spring, reflecting wage increases and the higher cost of wool. Men's summer-weight suits, particularly tropical worsteds, were not yet stocked in normal selections of sizes and fabrics. An additional advance in worsted suit prices at retail is anticipated this fall since manufacturers' prices rose approximately 7 percent in the second quarter.

Women's apparel was plentiful, with the possible exception of plied crepe rayon street dresses and cotton nightgowns. Sheer cotton dresses reappeared after several years' absence, but at sharply higher prices. Two-way stretch girdles were in good supply, but natural rubber yarn was not yet freely available to manufacturers. Nylon hosiery was widely sold at reduced prices in May and June as a shift to darker tones was forecast and warm weather promoted the bare-leg practice. Rayon hosiery was neglected even at bargain sales, since nylon was readily obtainable.

Higher prices of work clothing, including work shoes, are said to have retarded sales, and some retailers adopted a lower than customary mark-up in order to maintain a satisfactory sales volume. Manufacturers of work clothing and work shoes tried to hold prices stable during the second quarter. Plain white broadcloth shirts, largely hoarded for Fathers' Day shoppers, and inexpensive cotton pajamas, were still rarities.

Prices of footwear, especially men's and women's street shoes, rose to new postwar heights, having increased over 20 percent at retail and

33 percent at the manufacturers' level since price controls were dropped. However, public interest in less expensive footwear began to revive, and total purchases of shoes during the second quarter remained appreciably below the volume sold during the corresponding period of 1946.

Demand for the better grades of shoe leather, especially in the lighter weights, caused calfskins and kidskins and several types of cowhides to advance over the quarter. However, spot quotations for hides and skins declined over 7 percent in April, and leather prices also dropped with the decline in retail sales of shoes. Average quotations for calfskins and goatskins fell 18 and 13 percent, respectively, from March to April. In June calf leather alone was selling above the March level; quotations for the other leathers continued to be depressed by lagging shoe sales. Amritsar goatskins decreased 23 percent during the quarter, largely because of poor quality, since many skins were not properly salted for shipment to this country. Spot quotations for calfskins and shearling skins, as well as some kinds of packers' hides, moved upward again in May and June. Kipskins advanced consistently, June prices averaging nearly 50 percent higher than in March.

Housefurnishings and Miscellaneous

Average retail costs of housefurnishings increased 0.2 percent during the second quarter of 1947, and prices at the primary market level 2.7 percent. However, beginning in April, reported decreases in retail prices for housefurnishing articles, including upholstered furniture, inner-spring mattresses, and some lines of radios, were more numerous than in any other period in recent years. Reappearance of lower-priced merchandise, lower manufacturers' prices, and sales or competitive mark-downs were factors in the decline. In some instances store-wide price decreases were put into effect as a result of the President's request that prices be reduced.

At the primary market level, several bedding manufacturers and one producing wool floor-coverings reported lower prices. Prices for mattresses decreased at both levels of distribution as supplies became more plentiful. Trade comment indicated, however, that most manufacturers took no action to reduce prices, because of the high

material and labor costs. Average retail costs of wool floor-coverings were held down by the larger quantities of lower-priced goods appearing on the market, but supplies of some grades still were inadequate.

During the quarter, work was completed on the reintroduction in the primary market price index of all kinds and grades of wool floor-covering; prices for which had not been reported since 1942. Between 1942 and May 1947, price increases were 21.7 percent on axminster rugs, 19.8 percent on axminster carpet, 33.4 percent on velvet carpet, 30.1 percent on velvet broadloom, and 23.2 percent on wilton rugs. Further price increases on wool floor-covering were announced by most manufacturers late in June as a result of continued high material and wage costs. Prices of hard-surfaced floor-covering, still sold on an allotment basis, increased in primary markets despite lower linseed oil prices.

Prices for wood household furniture and wood office furniture in general, increased. However, many retailers continued to reduce prices of war-time merchandise. At June and early July furniture shows, more new designs were being shown than in many years, and retailers were buying cautiously, looking for improved quality in relation to prices. Upholstered furniture appeared to be in plentiful supply. However, walnut was used frequently to replace mahogany, which is limited in supply because of restrictions on exportation imposed by Britain and Mexico. Walnut veneer production was reported 39 percent larger in the spring of 1947 than in the same period of 1946. Volume of total furniture output dropped in May, and it is believed that the peak of the postwar boom in furniture has been seen. Cancellations of orders in May represented 24 percent of new orders booked.

With the exception of vacuum cleaners, retail costs continued to increase for most major appliances. Several large manufacturers of mechanical refrigerators and home laundry equipment increased prices to meet higher production costs. Some smaller appliances and unbranded articles sold at reduced prices. Retail prices of one major line of radios were cut for the second time, and one large manufacturer announced a price reduction to retailers. Early in June, distributors and dealers announced a revival of the practice (sus-

pended since May 1942) of making trade-in allowances on consumers' used vacuum cleaners.

During the quarter, the kinds and grades of cooking stoves for which primary market prices were reported in the prewar period, were reintroduced into the wholesale price index as production returned to normal. The following long-term price increases occurred between 1942 and May 1947: coal stoves, 24.7 percent; electric stoves, 27.2 percent; gas stoves, 28.7 percent; and oil stoves, 15.9 percent. Prices for dinnerware and glassware showed no change at the primary market level, but retail costs were beginning to decline with increased inventories of lower-priced sets.

Retail costs of miscellaneous goods and services rose 0.7 percent during the quarter. Increases were reported in some cities for newspapers, public transportation, hospital rates, and laundry and dry-cleaning services. Mixed price movements were reported for motion-picture admissions, beauty-shop services, and tobacco products. Prices of laundry and toilet soap were generally lower.

Residential Rents

Rents in 34 large cities combined, estimated on the basis of surveys in 17 cities, were about the same in June 1947 as in March. Fractional increases for some cities in May were offset by decreases reported in the June surveys. Rents in 10 cities (Atlanta, Birmingham, Buffalo, Chicago, Manchester, Milwaukee, Norfolk, Pittsburgh, Richmond, and St. Louis) were higher than when last surveyed in the fall of 1946. Six cities (Cleveland, Portland, Maine, Portland, Oreg., Detroit, Cincinnati, and Houston) reported decreases from their 1946 levels. Rents in Denver remained unchanged.

In late June, Congress passed a law extending Federal rent controls in a modified form. The act provides for the extension of Federal control of residential rents until March 1, 1948, and places the responsibility for its administration in the Office of the Housing Expediter. It removes controls from hotels and tourist accommodations, newly built housing commenced on or after February 1, 1947, and from all dwellings which at no time during the period February 1, 1945, to January 31, 1947, inclusive, were rented as housing accommodations.

The new rent law permits rents to be increased 15 percent above the existing maximum, providing the landlord and tenant mutually agree on a lease extending through December 1948. It also provides for local advisory boards with authority to increase rents or order decontrol on an area basis, subject to revocation within 30 days by the Housing Expediter. Evictions are made subject to State laws. All controls over building materials and construction are removed except those which prevent the use of materials for amusement or recreational construction.

Throughout the quarter, there was evidence that increasing numbers of rent increases were being granted in "hardship cases." It is expected that this type of increase will become more general under the new law.

The shortage of dwellings available for rent continued severe, although the number of new permanent nonfarm dwellings completed during the quarter was 182,200, as compared with 76,700 for the same period last year, and there was some indication of an increase in the number of vacant dwellings for sale. Preliminary reports from surveys in 5 of the 34 large cities indicated very low rental-vacancy rates.

Metals and Machinery

Prices of metals and metal products continued to advance during the second quarter of 1947, and in June were 42.6 percent above their 1926 level, the highest point since October 1920. Lower quotations for some metals caused the group index for nonferrous metals to decline during June—the first drop in 10 months. On the average, prices of metal products advanced less than 2 percent during the period March to June, compared to about 4 percent in the first quarter.

A characteristic in the metals and machinery market was a divergence in prices charged for the same type of commodity by different manufacturers. Early in the quarter a leading manufacturer of passenger cars announced price reductions ranging from \$25 to \$55 per car. On the other hand, within several weeks, two of the smaller producers were forced to advance their prices to offset increased material costs.

Slight decreases in average prices of farm machinery during the first quarter, as a result of

price cuts initiated by a leading manufacturer, were more than offset during the second quarter when another important producer announced increases ranging from 5 to as high as 20 percent on some machines. Similarly, the effect of the recent wage settlement on prices of insulated wire and cable varied between companies.

In an effort to improve the supply of copper, which had been critically short during the latter part of 1946 and early in 1947, Congress, effective April 30, suspended the excise tax on imports of foreign copper until March 31, 1949. This caused considerable confusion in the price structure. Foreign copper was sold at 24.0 cents a pound, while domestic copper remained firm at 21.5 cents a pound, and copper under contracts specifying price in effect at time of shipment, sold at an average of the two quotations. Early in June, consumer resistance to the premium on foreign copper caused the market to break, so that by June 16, a uniform price of 21.5 cents per pound prevailed for all newly mined copper. Supplies were still short and there were no indications of further price declines. Scrap prices, however, remained weak.

There was no indication that expiration on June 30 of premium payments on copper, lead, and zinc, would affect prices. During June it was announced that trading in copper and zinc on the commodity exchange would be resumed, after a 6-year suspension.

Import controls over tin and antimony—the only remaining wartime controls in the nonferrous metal field—were continued on an interim basis, pending final action by Congress. Early in April, the Reconstruction Finance Corporation advanced the price of tin sold by the Government smelter from 70 to 80 cents a pound to offset an increase in its purchase price.

Prices of silver and mercury fluctuated considerably. Quotations on silver dropped almost 10 cents a pound with the summer closing of jewelry and silverware factories and increased offerings by foreign suppliers, but firmer quotations were reported at the end of the period. Quotations on mercury declined slightly from an average of \$87.25 per flask in March to \$84.50 in June, compared with a wartime high of \$210.00.

The short supply of steel led to brief shut-downs by almost all the principal automobile

manufacturers. The increase in steel supplies anticipated, after the successful negotiation of a new wage contract providing direct wage increases and other benefits averaging 15 cents an hour, failed to materialize because of vacation closings in the coal mines late in June.

Prices of steel scrap fluctuated widely during the quarter but remained below the peaks reached in March 1947 when prices on No. 1 heavy melting scrap went to \$38 a ton. The market broke early in April with No. 1 heavy melting averaging \$30 a ton during May. Price recoveries of from \$2 to \$3 a ton were reported in June, following resumption of active mill buying.

Continuation of the Government's premium-payment plan, whereby subsidies were paid to foundry pig-iron producers who exceeded their quotas, precluded the necessity of a price rise on foundry pig iron to maintain the current volume of production.

The wage contract in the steel industry was paralleled in other metal industries, but aside from steel fasteners, for which advances up to 15 percent were reported, prices were relatively unaffected. On gray-iron castings, machine tools, construction machinery and general industrial equipment prices rose from 1 to 3 percent.

Building Materials

Wholesale prices of building materials rose to all-time peaks early in the second quarter of 1947, after which prices of some materials turned downward for the first time since early 1943. Over the quarter, prices declined 1.3 percent on the average, but in the first 6 months of the year, prices of all building materials rose 11 percent. From June 1946 to June 1947, the price increase for all building materials was 35 percent; for lumber and paint and paint materials, approximately 50 percent; for miscellaneous materials, 22 percent; for brick and tile, cement, and plumbing and heating, 11 to 12 percent; and for structural steel, 6 percent.

Generally speaking, prices of building materials at the dealer-to-contractor level increased during the second quarter of 1947, though the rate of increase was much less than in the first quarter. Among the materials which in many cities brought higher prices in the second quarter were concrete,

sand, gravel, sewer pipe, floor tile, and oak flooring. However, sharp decreases were registered in eastern areas for southern pine boards, Douglas fir dimension lumber, and turpentine.

In April the group index for building materials reached 178.8 percent of the 1926 average, surpassing by 6 percent the former peak in April 1920. Brick and tile, lumber, paint and paint materials, and the other building materials subgroups all approximated or exceeded their peaks following World War I. Nevertheless, the rise in prices since August 1939 has been considerably less than it was in the earlier war period, as indicated in table 2.

The supply of building materials generally was much easier, although a few items remained short. Demand for lumber and other building materials weakened with the general lag in the anticipated construction program. There were widespread reports that builders throughout the country were postponing new construction in pronounced resistance to high construction costs.

A break in the lumber market of 1.5 percent in May, was followed by a further drop of 1.2 percent in June. These declines may be attributed to increased production, buyer resistance, and keen competition. Southern pine dropped 5 percent in the past 3 months, with the most marked decreases in lower grades. Western pine ended this period at 6 percent above the March prices; June quotations, however, were off about 1 percent from May. The strength of western pine prices is due in part to its extensive use in the manufacture of millwork. Douglas fir advanced 2 percent during the quarter, although there was a fractional decline in May. Oak flooring prices remained firm.

Paint and paint materials, as a group, decreased 6.9 percent as a result of lower prices for some paint materials, chiefly drying oils and naval stores. Prices of prepared paints remained unchanged at the January level. From March to June, turpentine fell 40 percent and Chinawood oil 34 percent. Linseed oil, rosin, and shellac decreased approximately 20 percent in the same period. Rosin and linseed oil prices had reached all-time highs in March, with linseed oil up 110 percent since October 1946. Chinawood oil had reached high levels early in the war period. The

reduction in prices as supplies improved had long been anticipated.

Structural clay products and cement advanced almost 2 percent in the quarter, although cement prices were still below the 1920 peak. Supplies of both commodities were fairly satisfactory. Concrete block also was reported to be in more plentiful supply.

Prices of plumbing and heating equipment rose 1 percent, reaching a level 50 percent above the

prewar average. Although the shortage of pig iron has prevented normal production of many plumbing items, manufacture of more plumbing and heating equipment may be expected soon, as the steel industry has agreed to allocate more steel in the third quarter of 1947 for housing items. Largely responsible for the increase of 1 percent in the other building materials group were higher prices for millwork, sewer pipe, and copper sheets and wire.

TABLE 2.—Indexes [1926=100] of building materials prices and percentage increases, specified periods

Group and subgroup	World War I			World War II		
	July 1914 index	Peak index	Percent increase	August 1939 index	1947 peak index	Percent increase
All building materials.....	52.9	168.3 (April 1920).....	218.1	89.6	178.8 (April).....	99.6
Brick and tile.....	38.8	122.2 (August 1920).....	214.9	90.5	134.7 (June).....	48.8
Cement.....	55.1	127.7 (September 1920).....	131.8	91.3	114.3 (June).....	25.2
Lumber.....	50.2	159.0 (March 1920).....	296.4	90.1	273.5 (April).....	203.6
Paint and paint materials.....	51.5	176.2 (April 1920).....	242.1	82.1	176.1 (March).....	114.5
Plumbing and heating.....	(1)	(1)	-----	79.3	120.0 (May).....	51.3
Structural steel.....	58.7	255.3 (June 1917).....	334.9	107.3	127.7 (January).....	19.0
Other building materials.....	59.4	138.9 (September 1920).....	133.8	89.5	145.0 (June).....	62.1

¹ Unavailable.

Fuels and Utilities

The upward trend in primary market prices for all fuels and lighting materials continued during the second quarter. The index for the group as a whole rose to 103.9 percent of the 1926 average in June, 3 percent higher than in March and the highest point in 24 years. Heavy demand for petroleum products, in the face of a serious shortage of crude oil plus transportation difficulties, spotlighted price increases for petroleum and petroleum products, which advanced 7 percent as a group during the second quarter and 37 percent during the year ending June 1947.

Successive increases in prices of crude petroleum in different areas were announced during the quarter, resulting in higher prices for all types of petroleum products. The petroleum industry was operating at capacity to meet heavy demand for all products, and funds were being expended on new drillings and on experimentation to increase production from existing wells. Gasoline was informally rationed to dealers in a number of States. In the intense competition for available supplies of crude oil, refiners were reported to be paying price premiums of as much as 25 cents per barrel above posted prices.

Wholesale prices for bituminous coal and coke rose 1.4 percent during the quarter.¹ Anthracite quotations declined in April and May, as many operators and dealers returned to their prewar practice of reducing prices at the end of the domestic heating season in order to increase purchasing during the spring months. Retail prices of residential heating fuels in 55 cities rose 1 percent, with sharp increases in the New England, Southern Atlantic, and Pacific sections, generally reflecting the trend of the primary market price movements.

Chemicals and Allied Products

Prices of chemicals and allied products declined 9 percent during the second quarter, after reaching a postwar peak in April. The Bureau's primary market price index in June was 120.2 percent of the 1926 average, compared with 96.4 for June 1946 and 99.9 for October 1946, the last full month before general decontrol. Decreases for the quarter were led by prices on oils and fats, which dropped 40 percent from recent peaks, and

¹ Press reports indicate that widespread advances in coal prices were announced both at the mines and by retail dealers, following completion of the new wage agreement on July 8, 1947. Some increases in steel prices were also announced at the end of July.

drug and pharmaceutical materials, which declined 15 percent. Lower prices for these groups were considerably more than enough to offset slight increases for industrial chemicals and mixed fertilizers.

Prices of inedible fats and oils jumped sharply last fall following decontrol, raising the average 124 percent by March 1947. They turned downward in April, however, and dropped sharply in May and June. Lower prices for fats and oils appeared to reflect several factors, including (1) greater imports of copra, coconut oil, linseed oil and tung oil, (2) buyer resistance to the unusual price increases of the past 6 months, and (3) increased supplies of lard and butter. Leading the decline for fats and oils in the second quarter were inedible tallow and copra, reflecting a better supply situation for soap raw materials and the resistance of soap manufacturers to prevailing high prices. Quotations for tallow declined 56 percent and those for copra, 40 percent. Prices of fatty acids, oleic and stearic, declined substantially. Decreases occurred in prices of soybean oil and castor oil. Imports of copra and coconut oil from the Philippines, tung oil from China, and linseed oil from Argentina were increasingly favorable in the last few weeks of the period.

The drugs and pharmaceutical market weakened considerably, prices declining 15 percent during the quarter. Leading the declines was glycerin which fell from 55 to 40 cents a pound, following previously mentioned sharp drops in soap fats. Consumer resistance to high prices of glycerin, extensively used by the pharmaceutical companies, has been particularly sharp, despite curtailed supplies. Increased supplies brought ergot down 20 percent.

Considerable strength was displayed in prices of some drug and pharmaceutical materials and heavy chemicals over the 3 months, reflecting short supplies or higher raw material costs. Among these were quebracho extract, zinc chloride, alcohol (which followed higher quotations for molasses and corn), and citric acid. This was the first price rise for citric acid in 19 years, and the first change since 1939. Prices of sulphur, unchanged since 1938, also advanced.

Other substantial rises were recorded in prices of coal tar, benzene, menthol, and lead arsenate. Fertilizer materials prices remained firm, and

those of mixed fertilizers increased, as a result of brisk seasonal demand and limited supply. Potash prices increased because of the critical shortage of this product. Manufacturers have resorted to the use of substitute formulas reducing the required amount of potash, whenever possible.

Paper and Pulp

Continuing a steady advance since mid-1946, the Bureau's index of paper and pulp prices rose more than 6 percent during the second quarter of 1947, to a point 33 percent higher than the price level reached in June 1946. The increase was led by wood pulp, prices for which reached a level 123 percent over the 1926 average. Strong demand and meager supplies, together with higher prices in foreign markets, accounted for the advance. Sulphate and sulphite pulp rose during the quarter, from 10 to 12 percent, groundwood pulp more than 6 percent, and soda-bleached pulp more than 17 percent.

Prices for paper continued to rise, newsprint going up 7 percent and wrapping paper nearly 9 percent in primary markets between March and June. Scarcity and high prices of newsprint were reflected in higher prices of newspapers to consumers in some cities.

Average prices of boxboard rose slightly because of higher production costs, although one large manufacturer reduced prices for kraft liner board, effective May 1.

Prices for waste paper declined. An oversupply of folded news and book paper stock, in the face of poor demand, as many paper mills prepared to close for inventory and a vacation period during July, brought prices for these grades to new lows.

Rubber

The large supply of crude rubber, together with the current high level of production, precipitated a world-wide drop in rubber prices, which gained momentum as the quarter advanced. World stocks of crude rubber in May 1947, not including the synthetic product, were more than double those before the war.

Between March and June average prices for crude rubber dropped nearly 30 percent to the lowest level since August 1939. For some grades

of natural rubber, prices were reduced below the level set by the Government for a comparable synthetic product. Decreases were most marked in prices of amber and ribbed smoked sheets. Market prices for the less plentiful latex crepe remained firm. The demand for scrap rubber continued weak in the second quarter.

Effective April 1, free trading in crude rubber was again permitted, but Government controls over the use and production of rubber were extended to the end of March 1948. However, manufacturers are permitted to use a greater proportion of natural crude in manufacturing tires and certain other products. On May 1, trading in futures was resumed on the Commodity Exchange for the first time since early 1942.

As a result of greatly increased production—currently at a rate of about 81 million compared to 50 million in 1939—export controls were lifted, April 1, on new and used passenger-car tires. In May, mail-order houses and retail stores throughout the country began cutting tire prices. These cuts were followed by substantial price reductions by some manufacturers, reflecting lower costs of crude rubber and expected high tire production.

Wages in Women's Blouse and Waist Industry, January 1947¹

IN JANUARY 1947, the women's and misses' blouse and waist industry paid its workers an average wage of \$1.20 an hour, exclusive of premium pay for overtime.² Almost a fourth of all workers received \$1.50 or more an hour. Women earned, on the average, \$1.18 an hour, whereas men, who

represented only a small percentage of the industry's labor force, averaged \$1.43. Workers in New York City, where a great proportion of the industry is located, averaged \$1.29 an hour.

The women's and misses' blouse and waist industry is located mainly in the Middle Atlantic region and in wage areas with central cities of at least 100,000 population. Almost half the plants and more than two-fifths of the workers were in New York City in January 1947; Philadelphia accounted for almost a fifth of the workers.

More than two-thirds of the establishments studied, in which about 80 percent of the workers were employed, had union contracts, usually with the International Ladies' Garment Workers' Union (AFL). The small establishment (8-50 workers) predominated, and the contract shop was more common than the inside (or regular) shop.³ Almost 95 percent of the workers were women, and a majority of all workers were paid on a piecework basis.

Average Hourly Earnings

Workers in this industry had average hourly earnings, exclusive of premium pay for overtime, of \$1.20 in January 1947 (table 1). The earnings of individual workers varied from less than 45 cents to more than \$2.50 an hour. About a seventh received less than 75 cents, whereas approximately a fifth of the women and more than two-fifths of the men earned, on the average, at least \$1.50 an hour.

Since women constituted so large a proportion of the labor force, their over-all average earnings (\$1.18) differed little from the all-worker average. The somewhat higher earnings for men (\$1.43) may be explained partially by the fact that they were employed mainly as cutters—a skilled occupation—or as pressers, most of whom were paid in proportion to the amount of work completed. In the few occupations, however, in which both men and women were employed, the men generally received substantially higher earnings.

¹ Prepared by Fred W. Mohr of the Bureau's Wage Analysis Branch. Field work for the survey was under the direction of the Bureau's regional wage analysts. Detailed information will be available in a mimeographed report, *Wage Structure—Women's and Misses' Blouses and Waists, January 1947*. Available reports on other women's and misses' apparel industries include: *Wage Structure—Women's and Misses' Dresses, April 1946*; and *Wage Structure—Women's and Misses' Suits and Coats, July 1946*. Detailed wage data are also available for selected wage areas in the various regions.

² Based on a study of 7,573 workers in 173 establishments. It is estimated that this represented roughly half of the employees and plants primarily engaged in manufacturing women's and misses' blouses and waists and employing 8 or more workers.

³ A contract shop fabricates products from piece goods (or cut goods) assigned to it by a jobber or another manufacturer who owns the material and sells the finished product. An inside (or regular) shop purchases materials and cuts, sews, presses, sells, and ships the finished garments.

TABLE 1.—Percentage distribution of all plant workers in the women's and misses' blouse and waist industry, by straight-time average hourly earnings,¹ United States and selected regions, January 1947

Average hourly earnings ¹	United States ²	New England	Middle Atlantic	Great Lakes	Pacific
40.0-44.9 cents.....	0.2		0.2	0.3	
45.0-49.9 cents.....	.3		.2	.2	1.3
50.0-54.9 cents.....	1.4	1.4	1.5	.3	.4
55.0-59.9 cents.....	1.7	2.1	1.9	1.0	.1
60.0-64.9 cents.....	2.5	2.7	2.5	5.6	.7
65.0-69.9 cents.....	3.4	5.0	3.3	6.4	1.6
70.0-74.9 cents.....	4.3	4.9	4.5	5.1	1.8
75.0-79.9 cents.....	5.1	5.0	5.0	3.2	6.3
80.0-84.9 cents.....	5.9	16.9	5.2	7.6	3.5
85.0-89.9 cents.....	5.8	9.7	5.6	6.3	4.4
90.0-94.9 cents.....	4.8	5.7	4.6	5.6	5.6
95.0-99.9 cents.....	3.6	3.5	3.7	2.4	3.2
100.0-104.9 cents.....	6.1	3.9	6.2	4.7	6.8
105.0-109.9 cents.....	4.0	4.1	3.8	6.9	4.4
110.0-114.9 cents.....	5.1	3.2	5.1	8.1	5.0
115.0-119.9 cents.....	4.1	2.0	4.3	4.7	3.6
120.0-124.9 cents.....	3.7	1.9	3.8	4.9	4.0
125.0-129.9 cents.....	4.4	2.9	4.2	6.1	6.5
130.0-134.9 cents.....	3.2	2.5	3.0	2.9	4.9
135.0-139.9 cents.....	3.0	1.1	3.2	1.5	3.6
140.0-144.9 cents.....	3.1	1.9	3.3	1.7	2.7
145.0-149.9 cents.....	2.0	1.1	2.0	2.0	2.8
150.0-159.9 cents.....	5.1	3.4	5.3	4.1	5.9
160.0-169.9 cents.....	3.2	2.5	3.3	3.1	4.0
170.0-179.9 cents.....	2.5	3.0	2.2	2.7	4.9
180.0-189.9 cents.....	2.5	3.9	2.4	1.4	3.7
190.0-199.9 cents.....	2.1	1.1	2.2	.3	2.8
200.0-209.9 cents.....	1.9	1.1	2.1	.3	1.1
210.0-219.9 cents.....	1.3	.6	1.4	.3	1.2
220.0-229.9 cents.....	1.0	.6	1.0		1.0
230.0-239.9 cents.....	.5	.7	.6		.3
240.0-249.9 cents.....	.6	.5	.7	.3	.1
250.0 cents and over.....	1.6	1.1	1.7		1.8
Total.....	100.0	100.0	100.0	100.0	100.0
Total number of workers.....	15,560	802	12,399	590	1,518
Average hourly earnings ¹	\$1.20	\$1.10	\$1.21	\$1.07	\$1.27

¹ Excludes premium pay for overtime. Only first-shift workers were employed in this industry.

² Includes data for other regions in addition to those shown separately.

Occupational and Geographic Variations

The principal operations in this, as in other apparel industries, include cutting, sewing, and pressing. The cutting was done mainly by men, the sewing by women, and the pressing by both sexes. Almost half of the workers studied were section system sewing-machine operators,⁴ who averaged \$1.21 an hour. Single-hand (tailor) system operators received somewhat higher earnings (\$1.47), and men machine cutters received the highest pay (\$1.90). In the occupation of

⁴ Sewing-machine operators in this industry are usually classified as single-hand (tailor) system operators or section system operators. Under the former plan, each operator performs almost all of the machine sewing required to make an entire garment; under the section system an operator's work is limited to one operation, or possibly a few operations, on identical parts of a number of garments.

hand pressing, men averaged \$1.69 an hour and women, \$1.41.

In the Middle Atlantic region,⁵ where almost four-fifths of the workers were employed, straight-time average hourly earnings were 1 cent above the national figure of \$1.20. The highest earnings were in the Pacific region (\$1.27); workers in New England (\$1.10) and in the Great Lakes region (\$1.07) received less than the national average. In each of the regions for which separate data could be presented, the average earnings for women were 2 cents below the corresponding regional figure for all workers combined.

For a majority of the occupational groups, the average earnings in the Pacific and Middle Atlantic regions were somewhat higher than the national average; but the occupational averages in the Great Lakes and New England regions were generally below the over-all figure.

In New York City workers were paid, on the average, \$1.29 an hour—8 cents above the corresponding figure for the Middle Atlantic region but 3 cents below the average pay for workers in Philadelphia, the area employing the second largest number in this industry (table 2). Men machine cutters in New York received the highest occupational average earnings (\$2.20). Women section system sewing-machine operators averaged \$1.33 an hour, and single-hand (tailor) system operators received \$1.59. About a fourth of the women and three-fifths of the men in that area received \$1.50 or more an hour, as compared with corresponding national ratios of one-fifth and two-fifths.

Other Factors in Variations in Earnings

Workers in union establishments received, on the average, about three-tenths more than those employed in nonunion plants. For practically all occupational groups, both nationally and in

⁵ The regions used in this study are as follows: *New England*—Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont; *Middle Atlantic*—New Jersey, New York, and Pennsylvania; *Border States*—Delaware, District of Columbia, Kentucky, Maryland, Virginia, and West Virginia; *Great Lakes*—Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin; *Middle West*—Iowa, Kansas, Missouri, Nebraska, North Dakota, and South Dakota; *Southwest*—Arkansas, Louisiana, Oklahoma, and Texas; *Pacific*—California, Nevada, Oregon, and Washington.

TABLE 2.—Straight-time average hourly earnings¹ for all plant workers and selected occupations in the women's and misses' blouse and waist industry, by wage area, January 1947

Occupation and sex	Average hourly earnings in—							
	Allen- town, Pa.	Boston, Mass.	Bridge- port, Conn.	Chicago, Ill.	Los Angeles, Calif.	New York, N. Y.	Phila- delphia, Pa.	San Fran- cisco, Calif.
All plant workers.....	\$0.78	\$1.14	\$1.07	\$1.08	\$1.29	\$1.29	\$1.32	\$1.15
<i>Men</i>								
All men.....	.90	1.23	1.50	1.32	1.50	1.68	1.56	1.31
Selected occupations:								
Buttonhole makers, machine.....	.71	(?)	(?)	(?)	(?)	1.32	(?)	(?)
Cutters, machine.....	.93	1.79	1.64	1.57	1.97	2.20	2.03	1.42
Janitors.....	.55	(?)	(?)	(?)	(?)	(?)	.67	(?)
Pressers, hand.....	1.11	(?)	(?)	(?)	(?)	1.87	(?)	(?)
<i>Women</i>								
All women.....	.76	1.13	1.04	1.06	1.27	1.28	1.30	1.15
Selected occupations:								
Button sewers, machine.....	.82	.77	.88	1.06	1.11	1.12	1.39	(?)
Buttonhole makers, machine.....	.80	.74	.94	1.12	1.19	1.14	1.19	1.37
Inspectors, final (examiners).....	.76	(?)	.82	(?)	.70	1.05	(?)	(?)
Pressers, hand.....	.93	1.28	1.04	1.01	(?)	1.49	1.58	1.18
Sewers, hand (finishers).....	(?)	(?)	1.02	.91	1.01	1.18	1.12	.89
Sewing-machine operators—								
Section system.....	.78	1.00	.94	1.27	1.29	1.33	1.36	1.26
Single-hand (tailor) system.....	(?)	1.55	1.51	1.07	1.46	1.59	(?)	1.03
Thread trimmers (cleaners).....	.64	.75	.75	.75	.78	.84	.86	.79
Working foremen, processing departments.....	(?)	1.44	1.39	1.36	1.62	1.51	(?)	1.58

¹ Excludes premium pay for overtime. Only first-shift workers were employed in this industry.

² No workers in the occupation or insufficient data to justify presentation of an average.

the regions where comparisons were possible, the average earnings of workers in plants having union contracts were higher than for those not covered by agreements.

Incentive wage payments were a common practice, with more than three-fourths of the establishments paying at least 25 percent of their workers on a piece-rate basis. Incentive workers received substantially higher earnings in virtually all occupations for which comparisons with time-rated workers could be made. In the three occupations in which the greatest numbers of incentive workers were employed—women hand pressers, section system sewing-machine operators, and single-hand (tailor) system operators—the workers paid on that basis in the Middle Atlantic region had wage advantages over the time-rated workers, amounting to about 13, 20, and 31 percent, respectively.

Supplementary Wage Practices

The most common work schedules were 35 and 40 hours per week, with a fairly even division between the two. The former, however, was much more prevalent in the Middle Atlantic region than the latter. Scheduled workweeks in excess of 40 hours were almost nonexistent, and none of the plants operated on other than a single-shift basis.

Plant workers in about a fifth of the establishments received some nonproduction bonus payments, generally at Christmas time.

Supplements to wages in the form of paid vacations and insurance plans for plant workers were common in most regions. These benefits, especially in the Middle Atlantic and Pacific regions, were generally provided from a union health and welfare fund, into which employers paid a fixed percent of their total pay rolls.

Wages in the Machinery Industries, October 1946¹

STRAIGHT-TIME HOURLY EARNINGS of all plant workers in the machinery industries in large cities of the country averaged \$1.22 in October 1946.² These earnings, which exclude premium pay for overtime and night work, represent a gain of about a fifth since January 1945.

Earnings of \$1.00 to \$1.40 were received by a majority of the plant workers in October 1946. A fifth of the workers received less than \$1.00; a corresponding proportion received less than 80 cents in January 1945. About 1 in 4 was paid \$1.40 or more in October 1946, compared with \$1.15 or more in the earlier period. Earnings of less than 80 cents an hour were received by 1 of every 25 workers in October 1946 (table 1).

Women, constituting about a twelfth of the plant labor force, earned an average of \$1.00 an hour in October 1946, whereas the average for men was \$1.23. Hourly earnings of less than 75 cents were received by 1 in 12 women workers, compared with 1 of every 50 men. These differences in average earnings can be attributed only in part to the lower skills of the jobs in which most women were employed. Generally, men averaged at least 10 percent more than women in the same occupational classification.

Altogether, about a million workers were employed in the machinery industries in October 1946, and, between 600,000 and 700,000 of these were employed in cities of 100,000 or more. These industries manufacture a wide variety of products, including engines and turbines, agricultural machinery and tractors, construction and mining machinery, metalworking machinery (except machine tools and machine-tool accessories), industrial machinery, office and store machines, and household and service-industry machines

(such as laundry equipment, sewing machines, refrigerators, and air conditioning units).³

Geographic and Occupational Variations

Machinery manufacture is of major importance throughout the United States, but it is of particular importance in the Great Lakes, Middle Atlantic, and New England States.⁴ Approximately four-fifths of all workers in the machinery industries are employed in these three regions, where the heavy concentration of population and manufacturing provide a ready market for virtually all types of mechanical equipment. Average hourly earnings in the Great Lakes region, where the machinery industries are most heavily concentrated, were 4 cents above those in the Middle Atlantic States. In New England, the third most important region in terms of number of workers, the average was \$1.11 an hour.

Wages in the Great Lakes region were exceeded by those on the Pacific Coast; the lowest average was found in the Southeast. More than a fifth of the workers in this region earned less than 75 cents, although practically all in the Pacific region were paid more than this amount. Wages paid in the Southwest averaged 20 cents an hour more than those in the Southeast.

Occupational Variations. Average hourly earnings varied widely among the occupations studied. Relatively few occupations exceeded \$1.50 an hour; wages paid for most skilled jobs averaged between \$1.30 and \$1.45, and \$1.15 to \$1.30 averages were frequent for semiskilled jobs.

Although straight-time hourly earnings differed appreciably among cities in the same region, areas

¹ The scope of the present survey, although corresponding to industry group 35 of the Standard Industrial Classification Manual (1941 edition, issued by the Bureau of the Budget) except for the exclusion of machine tools and machine-tool accessories, was limited to establishments with 8 or more workers. One-third of the plants employing about one-half of the workers in the industry in wage areas of 100,000 or more population were studied.

² The regions used in this study are as follows: *New England*—Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont; *Middle Atlantic*—New Jersey, New York and Pennsylvania; *Border States*—Delaware, District of Columbia, Kentucky, Maryland, Virginia, and West Virginia; *Southeast*—Alabama, Florida, Georgia, Mississippi, North Carolina, South Carolina, and Tennessee; *Great Lakes*—Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin; *Middle West*—Iowa, Kansas, Missouri, Nebraska, North Dakota, and South Dakota; *Southwest*—Arkansas, Louisiana, Oklahoma, and Texas; *Mountain*—Arizona, Colorado, Idaho, Montana, New Mexico, Utah, and Wyoming; *Pacific*—California, Nevada, Oregon, and Washington.

³ Prepared by John F. Laciskey of the Bureau's Wage Analysis Branch. The field work for the survey was under the direction of the Bureau's regional wage analysts.

⁴ The present survey was limited to wage areas in which there was a city of at least 100,000 population. Inclusion of smaller communities in the study would presumably have little effect on the national average presented here, since about two-thirds of the workers in the machinery industries are located in the areas surveyed. Moreover, in a previous study made by the Bureau in January 1945 (Monthly Labor Review, February 1946) it was found that wage levels in machinery establishments in these areas were only about 7 percent above those in smaller communities.

TABLE 1.—Percentage distribution of all plant workers in machinery establishments, by straight-time average hourly earnings¹ and region, October 1946

Average hourly earnings ¹	United States	New England	Middle Atlantic	Border States	South-east	Great Lakes	Middle West	South-west	Mountain	Pacific
Under 60.0 cents.....	0.2	0.1	0.1	1.6	1.9	0.1	0.2	0.2	0.2	(?)
60.0-64.9 cents.....	.2	.4	.2	1.8	4.9	.1	.4	.4	.1	(?)
65.0-69.9 cents.....	.6	1.8	.4	1.8	6.6	.4	.7	.7	.9	
70.0-74.9 cents.....	.9	1.8	.7	3.6	8.2	.6	2.2	1.9	.7	0.1
75.0-79.9 cents.....	1.8	4.5	1.4	4.2	12.0	1.0	4.9	5.5	1.2	.2
80.0-84.9 cents.....	2.5	6.1	2.6	6.5	9.2	1.4	7.4	4.4	5.5	.6
85.0-89.9 cents.....	3.5	7.0	3.7	6.4	6.2	2.5	7.7	7.0	7.9	1.4
90.0-94.9 cents.....	5.0	7.3	5.3	9.6	5.5	4.4	7.7	5.7	8.2	2.9
95.0-99.9 cents.....	6.0	8.7	6.7	7.6	4.7	5.4	9.8	6.1	9.5	3.0
100.0-104.9 cents.....	7.7	8.3	8.0	8.1	6.0	7.3	8.3	7.7	6.2	7.6
105.0-109.9 cents.....	6.9	6.7	7.7	6.3	5.8	6.9	6.7	4.3	10.0	5.6
110.0-114.9 cents.....	7.2	6.9	7.1	7.5	4.0	7.6	5.6	4.9	4.9	7.3
115.0-119.9 cents.....	6.9	6.8	7.0	6.2	4.0	7.2	3.2	4.0	5.0	7.9
120.0-124.9 cents.....	6.5	5.7	6.0	5.5	2.8	7.0	8.5	3.5	9.7	6.0
125.0-129.9 cents.....	7.5	5.3	6.6	5.1	5.5	7.8	7.5	13.5	4.5	7.3
130.0-134.9 cents.....	6.6	4.3	6.8	4.8	5.4	7.3	1.9	2.8	5.5	7.0
135.0-139.9 cents.....	6.1	3.8	6.3	3.8	1.9	6.8	7.1	3.5	5.6	5.5
140.0-144.9 cents.....	5.6	2.9	5.8	2.5	2.7	6.0	2.6	5.8	3.5	9.0
145.0-149.9 cents.....	4.0	2.8	4.3	2.0	.5	4.3	3.3	4.0	1.8	4.9
150.0-159.9 cents.....	6.4	3.8	6.0	3.0	1.3	6.5	2.1	10.6	3.7	13.4
160.0-169.9 cents.....	3.8	2.2	3.3	1.0	.3	4.4	.8	2.7	2.4	6.1
170.0-179.9 cents.....	2.0	1.2	2.0	.5	.4	2.4	1.0	.2	1.6	2.0
180.0-189.9 cents.....	1.0	.7	1.0	.3	.1	1.2	.2	.1	.7	1.0
190.0-199.9 cents.....	.5	.4	.4	.1	.1	.6	.1	.1	.3	.5
200.0-209.9 cents.....	.3	.2	.3	(?)	(?)	.4	.1	.1	.1	.4
210.0-219.9 cents.....	.1	.1	.1	.1	(?)	.1	(?)	(?)	.1	.1
220.0-229.9 cents.....	.1	.1	.1	(?)		.1			.1	.1
230.0 cents and over.....	.1	.1	.1	.1		2			.2	.1
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Average hourly earnings ¹	\$1.22	\$1.11	\$1.21	\$1.06	\$0.65	\$1.25	\$1.08	\$1.15	\$1.13	\$1.30
Total number of workers.....	570,610	63,105	109,020	7,047	7,559	321,387	13,154	11,832	2,164	35,342

¹ Excludes premium pay for overtime and night work.² Less than 0.05 of 1 percent.TABLE 2.—Average straight-time hourly earnings¹ for selected occupations in machinery establishments, United States and selected wage areas, October 1946

Occupation	United States ²		Average hourly rates in—												
	Num-ber of workers	Aver-age hourly rates	Bos-ton, Mass.	Chat-tanooga, Tenn.	Chi-cago, Ill.	Cleve-land, Ohio	Day-ton, Ohio	Det-roit, Mich.	Hous-ton, Tex.	Los Ange-les, Calif.	Mil-wau-kee, Wis.	New York, N. Y.	Phila-del-phia, Pa.	San Fran-cisco, Calif.	St. Louis, Mo.
Assemblers, class A.....	15,513	\$1.37	\$1.18	\$1.20	\$1.37	\$1.47	\$1.52	\$1.55	\$1.31	\$1.40	\$1.46	\$1.40	\$1.42	\$1.40	\$1.26
Assemblers, class B.....	27,515	1.23	1.06	1.08	1.25	1.31	1.28	1.41	1.06	1.24	1.41	1.17	1.21	1.31	1.02
Assemblers, class C.....	19,919	1.11	.87	.91	1.15	1.27	1.15	1.30	.86	1.06	1.25	.97	1.03	1.14	.92
Drill-press operators, single and multiple-spindle, class A.....	2,654	1.27	1.26	1.15	1.33	1.36	1.35	1.50	1.27	1.31	1.46	1.35	1.39	1.35	1.15
Drill-press operators, single and multiple-spindle, class B.....	7,134	1.24	1.04	1.07	1.20	1.39	1.41	1.37	1.06	1.19	1.44	1.14	1.09	1.29	1.07
Drill-press operators, single and multiple-spindle, class C.....	5,478	1.10	.92	.81	1.15	1.05	1.22	1.10	(³)	.98	1.39	.90	.95	1.12	.96
Electricians, maintenance.....	3,349	1.39	1.28	1.35	1.40	1.49	1.42	1.59	1.56	1.48	1.29	1.45	1.38	1.64	1.40
Engine-lathe operators, class A.....	7,999	1.42	1.35	1.36	1.42	1.49	1.44	1.64	1.42	1.49	1.50	1.43	1.51	1.56	1.31
Engine-lathe operators, class B.....	5,523	1.24	1.17	1.01	1.28	1.34	1.39	1.40	1.36	1.35	1.24	1.22	1.20	(³)	1.09
Engine-lathe operators, class C.....	2,086	1.13	1.04	(³)	1.23	1.15	1.08	1.26	(³)	(³)	1.30	1.00	.99	(³)	1.01
Inspectors, class A.....	4,498	1.38	1.32	1.28	1.40	1.48	1.44	1.63	1.51	1.41	1.38	1.44	1.55	1.52	1.21
Inspectors, class B.....	7,490	1.25	1.16	(³)	1.25	1.38	1.26	1.42	1.32	1.20	1.25	1.29	1.16	1.35	.96
Inspectors, class C.....	4,025	1.08	.95	(³)	1.13	1.12	1.14	1.22	(³)	(³)	1.11	1.07	1.12	1.12	.86
Janitors.....	9,465	.95	.85	.73	.94	1.02	.98	1.13	.84	.97	.92	.90	.91	1.08	.82
Machinists, production.....	9,132	1.41	1.26	1.30	1.40	1.35	1.50	1.49	1.45	1.52	1.39	1.45	1.38	1.53	1.40
Milling-machine operators, class A.....	4,405	1.42	1.43	1.25	1.48	1.47	1.35	1.65	1.30	1.46	1.42	1.43	1.48	1.53	1.30
Milling-machine operators, class B.....	6,458	1.28	1.20	1.14	1.24	1.36	1.52	1.38	1.12	1.30	1.44	1.26	1.27	1.33	1.05
Milling-machine operators, class C.....	3,325	1.20	1.02	(³)	1.31	1.06	1.15	1.28	(³)	(³)	1.42	1.07	1.01	(³)	.97
Set-up men, machine tools.....	4,404	1.43	1.24	1.25	1.41	1.59	1.43	1.57	(³)	1.48	1.37	1.41	1.40	1.48	1.48
Tool and die makers.....	8,608	1.56	1.31	1.39	1.59	1.68	1.70	1.77	1.54	1.60	1.48	1.65	1.59	1.83	1.68
Truckers, hand.....	9,645	1.00	.94	.76	.98	1.10	1.07	1.13	.80	(³)	1.00	1.02	.97	1.10	.94
Turret-lathe operators, hand (including hand-screw machine), class A.....	8,030	1.40	1.28	1.27	1.45	1.47	1.40	1.59	1.28	1.42	1.54	1.44	1.52	1.49	1.34
Turret-lathe operators, hand (including hand-screw machine), class B.....	8,417	1.29	1.11	(³)	1.34	1.41	1.44	1.44	1.18	1.28	1.34	1.22	1.26	1.29	1.15
Turret-lathe operators, hand (including hand-screw machine), class C.....	2,979	1.21	.97	(³)	1.22	1.17	1.17	1.35	(³)	1.09	1.50	1.02	1.04	(³)	.91
Estimated number of plant workers (in thousands).....	570.6	-----	10.4	1.8	58.9	36.8	35.5	38.0	7.6	23.1	40.8	16.9	23.9	10.5	10.1

¹ Excludes premium pay for overtime and night work.² Includes all wage areas with cities of 100,000 or more population in addition to those shown separately.³ No workers or insufficient number to justify presentation of an average.

in the Great Lakes and Pacific regions generally had the highest wage levels; the Southeast usually showed the lowest rates. As in January 1945, Cleveland and Detroit had higher wage levels than other Great Lakes centers of the industry; but differences in wage levels among Great Lake cities were narrower in October 1946 than in January 1945. During the intervening period earnings increased by a fourth in Milwaukee, a fifth in Chicago, and a sixth in Cleveland and Detroit. Information for a limited number of occupations and wage areas is presented in table 2.⁵

Other Factors in Variations in Earnings

Average hourly earnings tended to increase with size of establishment and, with few exceptions, were higher for union than for nonunion establishments;⁶ earnings of incentive workers usually exceeded those of time workers in the same occupation. In general, average hourly earnings of workers in union establishments were 7 to 15 percent above those for comparable work in non-union plants. Incentive workers earned 10 to 25 percent more than time workers.

These factors—unionization, size of establishment, and method of wage payment—are interrelated in their effect on interplant wage differences, since unionization⁷ and incentive pay are both more widespread among large than small establishments.⁷ In an effort to isolate (at least in part) the effect of these factors on interplant differences in wage levels, a special analysis was made for a limited number of representative jobs.⁸ This analysis indicates that although all three factors seemed to affect wage levels, incentive methods of wage payment apparently had the greatest influence on interplant differences in these levels, and size of establishment apparently had the least effect.

⁵ Further information on the wage structure of these industries, including data for additional plant and office occupations in these and other leading centers of the machinery industries, is available on request.

⁶ Approximately four-fifths of the workers included in the survey were employed in unionized establishments.

⁷ About nine-tenths of the establishments studied employing more than 500 workers, were operating under terms of union agreements, compared with one-fourth of the plants having 50 or fewer workers.

⁸ Based on tabulations showing average union and nonunion and average time and incentive earnings separately by size of establishment, and a tabulation presenting average earnings in union and nonunion establishments by method of wage payment.

For most of the jobs studied, the higher earnings in the large establishments appear to be the result of the high proportion of incentive workers. Earnings of time workers in the large establishments were, in general, only slightly higher than in other establishments. For tool and die makers and machinists, who were predominantly paid on a time basis, earnings differed but slightly between various-sized establishments; the fact that both of these are jobs for which there is a highly competitive market may also explain the uniformity in rates.

Supplementary Wage Practices

Although only rough comparisons can be made between supplementary wage practices found in January 1945 and in October 1946, because of the more limited geographic scope of the current survey, apparently little change had occurred in most of the practices studied. Vacation plans had become appreciably more widespread, and scheduled hours were well below those found in January 1945, when wartime production needs kept them at high levels.

Paid vacation plans were provided for plant workers by more than four-fifths of all the establishments studied in October 1946, compared with 70 percent in January 1945.⁹ In both periods about 9 out of 10 plants had paid vacations for office workers. In October 1946, the typical vacation was still 1 week for plant workers with a year's service; 2-week vacations remained somewhat common for office workers. Almost all machinery establishments that had vacation plans included workers with a year's service in these arrangements, but the length of the vacation period tended to increase with years of service. Whereas, in only 7 percent of the establishments plant workers received vacations of more than a week after a year's service, a sixth of the establishments reported such vacations after 2 years' employment. After 5 years' service, 2-week vacations were the most common single provision.

The increase in the length of the vacation period with years of service seemed to be somewhat less

⁹ This increase in vacation plans is indicated not only by a comparison of the data for all establishments studied previously with those included in the current survey, but by a study of information for identical cities.

marked for office than for plant workers, because office employees received longer vacations after a year's employment than did plant workers. Although slightly more than half of the establishments provided 2-week vacations for office employees with a year's service, three-fourths had established such vacation periods after 5 years' employment. Vacations rarely exceeded 2 weeks after this length of service.

Formal paid sick leave plans for office workers were found in less than a tenth of the establishments, with 2 weeks of leave provided in almost half of these cases. Only 2 percent of the plants had formal sick leave plans for plant workers.

Insurance or pension plans for plant and office workers were provided by slightly more than half of the establishments. Life insurance plans were somewhat more common than health insurance.

Bonuses not directly related to workers' output were paid by about 40 percent of the establishments. Most commonly these were provided in the form of Christmas bonuses. Averaged over all workers in the industry, these payments amounted to less than 1 cent an hour.

In contrast with January 1945, when war production resulted in operation of most machinery plants for at least 48 hours a week, almost half the establishments were working on a 40-hour workweek in October 1946. About a fourth, however, still operated 48 hours or more. Scheduled hours tended to be somewhat longer in New England than in the other regions.

Despite the end of war production, the proportion of workers employed on morning, afternoon, and evening shifts was apparently about the same in October 1946 as in January 1945. About four-fifths of all plant workers were on the first shift and about a sixth on the second shift, with the remainder employed on night or other shifts.

In about 9 of every 10 establishments operating extra shifts a higher rate was paid for such work. The most frequently reported differential for second-shift work was 5 cents an hour added to the first-shift rate.

Wages in Radio Manufacture, January 1947

AVERAGE HOURLY EARNINGS in January 1947 for a limited number of occupational classifications in five of the principal centers of radio manufacture are summarized in the accompanying tabulation.¹ These cities together employed about half of the estimated 143,000 workers in the industry.

The job classifications included account for about 30 percent of the industry's labor force, with class C assemblers alone accounting for 1 in every 5 workers in this mass-production industry. Earnings of men in this occupation ranged from an average of 84 cents an hour in Cleveland to \$1.03 in Los Angeles and in the Philadelphia-Camden area, while earnings of women ranged from an average of 84 cents in Cleveland to 95 cents in the Philadelphia-Camden area. Among skilled men workers, average earnings of tool and die makers were uniformly high, ranging from \$1.61 in Cleveland to \$1.83 an hour in New York.

Average straight-time hourly earnings¹ in selected occupations in radio manufacture² in 5 wage areas, January 1947

Occupation, grade, and sex	Average hourly rates in—				
	Chi- cago	Cleve- land	Los An- geles	New York	Phila- del- phia and Cam- den
Men					
Assemblers, class B.....	\$1.12	\$1.05	(?)	\$1.15	\$1.28
Assemblers, class C.....	1.02	.84	\$1.03	.90	1.03
Inspectors, class B.....	1.16	1.25	1.17	1.23	1.12
Janitors.....	.94	.89	1.01	.96	.94
Punch-press operators, class B.....	1.08	1.03	(?)	.91	1.18
Tool and die makers.....	1.69	1.61	1.75	1.83	1.64
Truckers, hand.....	.99	(?)	(?)	.95	.94
Women					
Assemblers, class C.....	.92	.84	.90	.93	.95
Inspectors, class C.....	.99	.88	(?)	1.05	.89
Punch-press operators, class B.....	.99	1.00	1.01	.92	.93
Estimated number of plant workers (in thousands).....	27.0	2.8	2.5	17.9	21.4

¹ Excluding premium pay for overtime and night work.

² Includes establishments manufacturing radios, radio equipment (except tubes), and phonographs.

³ Insufficient data to justify presentation of an average.

⁴ Based on a field survey conducted by the Bureau's Wage Analysis Branch. Further information on the industry's wage structure, including data for additional plant and office occupations in these and other areas, is available on request.

President's Midyear Economic Report to Congress¹

IN SUBMITTING a midyear Economic Report to the Congress on July 21, 1947,² President Truman called attention to economic developments since the first Economic Report was presented, and appraised the progress made toward meeting the goals set forth in the first report. He also pointed out problems requiring immediate attention.

"At midpoint in the year 1947," said the President, "we have surpassed previous high records of civilian production. . . . Month by month there has been talk of recession; month by month recession has failed to materialize. In June we reached a level of 60 million civilian jobs, regarded by many as impossible of attainment. Our standard of living is exceptionally high, and purchasing power has thus far been adequate to absorb completely the enormous production of American farms, mines, and factories. Farm income has attained a record level. The financial position of business is strong. A healthy slowing down in inventory accumulation has taken place. Business investment in plants and equipment has increased this year, even above the record highs of last year. Management and labor have cooperated in maintaining industrial peace, and a wide range of important collective-bargaining agreements have been signed without widespread strikes. With a slight reduction in workweek, productivity is on the increase. . . .

"The unprecedented prosperity of our Nation must not be a cause for idle self-congratulation. We must remember that full employment at a high price level is being sustained at present by the reconversion demands of business and the backlog demands of consumers, by extensive use of savings and credit, and by an extraordinary excess of exports over imports. These are temporary props to our economic system. As they weaken, we shall need to make many basic readjustments to complete the transition to a perma-

nently stable and maximum-level peacetime economy.

"These adjustments take time to accomplish in our free, enormous, and complex economic system. They must be made before the lack of them produces serious unemployment and business decline. Adjustment through recession or depression is tragic, costly, and wasteful. Moderate adjustments, made in time, can accomplish more than drastic measures in a crisis produced by delay or neglect."

The failure to make such adjustments after World War I led to the sharp recession of 1920-21 and, finally, to the great depression of the 1930's. Now again "price and income adjustments stand foremost in need of attention."

Industrial and Agricultural Prices

"Prices increased sharply in the second half of 1946, increased more slowly in the first quarter of 1947, and then leveled off in the second quarter. This leveling off reflected some catching up of supply with immediate demand, an increase of consumer resistance, and the encouraging response of many businessmen to the Government's price advice, which they recognized to be in their own long-range interest. . . .

"Voluntary price adjustments by manufacturers did not become widespread. The attempt of many retailers and wholesalers to respond to consumer resistance with substantial price reductions ran into manufacturers' resistance to lower prices at the other end. Some suppliers are, however, beginning to furnish larger quantities of goods in lower-price lines in clothing, furniture, and some appliances. Substantial reductions in prices require trimming of margins all along the line of production and distribution. . . .

"There are many areas where price reductions still are necessary to check current or prospective declines in demand and to provide outlets for increased production. . . .

". . . Although there was a leveling off in food prices in the second quarter of this year, bad weather, extensive floods, and unexpectedly urgent foreign need have caused some further price increase in food and farm products in recent weeks. . . .

". . . In view of the existing uncertainty in the farm outlook, it is the duty of food growers,

¹ The Midyear Economic Report of the President to the Congress July 21, 1947. Washington, 1947.

² Under the terms of the Employment Act of 1946, Public Law No. 304 (79th Cong., 2d sess.), the President is authorized to submit such supplementary reports to the annual Economic Report as he deems necessary. For a summary of the first Economic Report, see *Monthly Labor Review*, February 1947 (p. 234).

processors, and the Government to keep the public currently informed of the real facts concerning our food supply. Unfounded fear of food shortages should not be allowed to lead to speculation, hoarding, and unnecessary buying."

Wages and Salaries

"Although the moderate and peaceful wage adjustments during the first half of the year improved the position of many wage earners, the majority of consumers were not directly benefited. Because of increases in the cost of living, the purchasing power of total consumers' incomes is no higher than at the beginning of the year.

"In some cases wage increases are still needed to attain workable relations in the wage and salary structure, and to alleviate hardship due to wages which are substandard or which have risen substantially less than the increase in the cost of living.

"Except for such special circumstances, wage increases should be related to general trends in productivity and not made on a basis which forces price increases or prevents price reductions needed to assure sale of increasing supplies.

"With the wage adjustments already made and those still needed in special wage areas, it follows that the patterns of workable price relations ultimately arrived at will be on a somewhat higher price level than would otherwise have come about. However, this is not a justification for pyramiding wage-price increases or failing to make price reductions whenever and wherever possible.

"... it is imperative that legislation be enacted to extend the coverage of the Fair Labor Standards Act, to increase the minimum wage level to at least 65 cents an hour, and to enlarge social-security benefit payments in view of the higher cost of living.

"The earnings of the coal miners under the new contract must be judged in the light of the character of their work and the labor needs of the industry. There has been exaggeration of the size of this adjustment compared with the adjustments previously made in many other industries. Every effort should be made to absorb the cost increases in the coal-mining industry and the industries indirectly affected, through increased productivity and through reduction in profit margins.

"The increases that have already been made in coal prices are contributing to inflationary pressures. We have a right to expect that, as operating adjustments toward maximum efficiency are made and present shortages are overcome, the price of coal will be restored to a lower level, thus easing the cost situation for industrial, railway, and domestic users. Meanwhile, pyramiding of price advances by coal distributors is wholly unjustified.

"Similarly, increases in the price of steel would have a widespread inflationary effect. Steel companies should exercise extraordinary caution at this stage of our reconversion effort to see that increases in coal prices or other costs are offset as fully as possible through the savings of continuous and high-level operation. Recent favorable earnings should permit the absorption of an extraordinary cost over a short period in order to stabilize prosperity for the longer run.

"In no case should the particular wage increases in the mining industry be made the basis for wage demands in other fields governed by different circumstances.

"It is in the interest of steady expansion of the economy that, with the aid of collective bargaining, prices and wages be brought in line with general productivity trends."

Housing and Other Construction

"Although housing construction has been higher in 1947 than in 1946, it lags far behind the real needs of our people for homes. . . .

"The needed stimulus to more housing construction, and also to industrial and commercial construction, depends largely upon lower prices. Housing costs can and should be substantially lowered through the efforts of material suppliers, builders, and workers.

"Of utmost importance is immediate enactment of the comprehensive housing program which I have previously recommended to the present Congress. Without such a law, housing is seriously handicapped."

Foreign Aid Program

"... We must continue to help other countries help themselves, until the reconstruction of their own economies reaches the point where they are able to pay their way by exchange of goods and

services. . . . A large excess of exports over imports occurring at a time of inflationary pressure has created some strain on the economy. But this strain is of moderate proportions and will be of temporary duration. Our exports have not necessitated undue denial at home, where our standards of living are much higher than before the war. . . .

"For the purposes of our foreign policy it is worth enduring temporary shortages of a few commodities within the United States. This will bring lasting benefits in the long run. In any case, the costs of effective foreign aid programs will be only a very small fraction of the cost of winning the war, and they are vital to the winning of the peace."

Responsibilities of Government

"Economic adjustment to changing conditions is, in a free enterprise economy, accomplished largely through a multitude of voluntary decisions by business management, farmers, and labor . . . Government must, however, at all times exert its complementary influence.

"Legislative action on minimum wages, on social security, and on housing, as already indicated, forms part of the immediate responsibility of government.

"In addition, the recent uncertainties . . . as to the effect of the crop situation upon food prices, the effect of the coal-mine settlement upon industrial prices, the trend of housing costs and house production, and the whole matter of foreign economic policy have a vital bearing upon the immediate fiscal policies of the Government. The developments in these areas mean that the inflationary factors in the economy may become stronger.

"Tax reduction now would add to inflationary pressures and would also prevent the debt reduction which should be carried out in prosperous times to strengthen the Nation's financial position against future contingencies. A policy of restraint at the present time will enable the Government to use fiscal measures effectively should the time come when they might be needed to lend support to the economy. . . .

"Long-range economic programs will also be required. They embrace resource and regional development, health and welfare, antimonopoly

programs, stabilization devices, and many other undertakings essential to the full realization of our superb economic potential."

Nation's Economic Budget

In appraising the economic situation, the President presented the Nation's economic budget for the first half of 1947 and compared it with the budget for earlier periods.

The Nation's economic budget is a concise statement of the flows of income and expenditures by which the principal economic groups are related in the national economy.³ (See chart.) Four such groups are identified—individual consumers, businesses, foreign nations, and government (Federal, State, and local)—in such a manner that the sources of income (receipts) and the amount spent for goods and services (expenditures) of each group may be measured and added to obtain the total gross national product.⁴ Since expenditures of one group are receipts of another, receipts and expenditures at any given time are shown in balance. The greater the expenditures, the greater the volume of production and gross national product.

If, at a given level of output, the sum of these expenditures fails to equal the value of goods and services being produced, either prices will adjust to enable expenditures to absorb a greater output; or else the output will be curtailed to equal the expenditures. The first method of adjustment sustains full employment; the second leads to a recession of production and employment.

The objective set forth in the first Economic Report was to maintain the condition of full employment, and the corresponding level of production, which had been reached at the end of 1946. This could be done only if all groups were able to maintain their expenditures, or if a decline in the expenditures of one group could be offset by an increase in the expenditures of another. Rising prices had reduced the purchasing power of consumer expenditures and threatened to cause a curtailment of consumption. Business expenditures for investment were not expected to rise during 1947; indeed, a decline in the rate

³ For a detailed explanation of the Nation's economic budget, see Economic Report of the President, January 8, 1947, pp. 5-8 and appendix A.

⁴ For a statement on the gross national product see article on Revised Estimates of National Income and Product, p. 325 of this issue.

of investment in inventories was in prospect. Government expenditures were not expected to rise; and it appeared unlikely that foreign nations would increase their net expenditures for American exports. The problem was therefore how to maintain the purchasing power of consumers, either by increasing their incomes to sustain their consumption at the higher price level; or, preferably, through a reduction of prices, to restore the purchasing power of their incomes.

Employment and production in the first half of 1947 were only slightly higher than in the last quarter of 1946. Largely because of higher prices, the gross national product, measured in dollar terms, rose by about 3 percent. Consumers' and business expenditures did not rise as much, indicating that these two groups were taking actually less goods and services in the first half of 1947 than they did at the end of 1946. As the accompanying

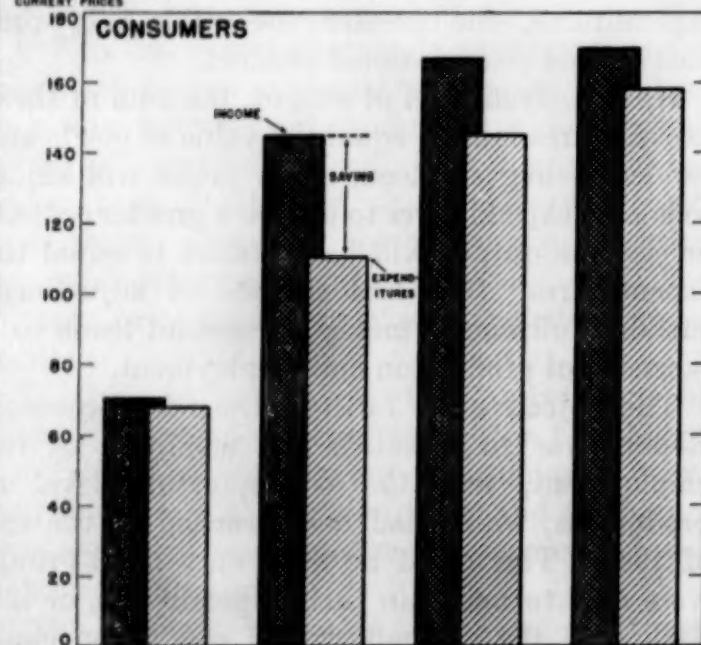
chart shows, consumer incomes in the first half of 1947 increased slightly and consumer expenditures increased somewhat more. Consumers' savings, therefore, declined. Business receipts increased sharply but business expenditures declined.

Government expenditures increased because of loans and grants to foreign nations; and the net expenditures of foreign nations (above their sales to this country) likewise increased. These sources of demand, unforeseen at the time of the first Economic Report, filled the gap which might otherwise have occurred if individuals and businesses had been unable to absorb the entire product.

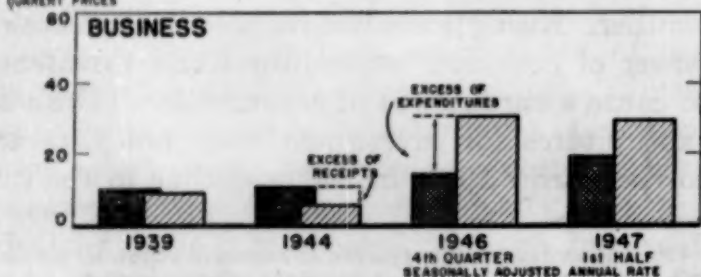
The balance of receipts and expenditures at a very high level of national product was thus achieved during the first half of 1947 by a sharp increase in exports, largely supported by Government aid to foreign buyers. The Midyear Economic Report again calls attention to the

THE NATION'S ECONOMIC BUDGET *

BILLIONS OF DOLLARS
CURRENT PRICES

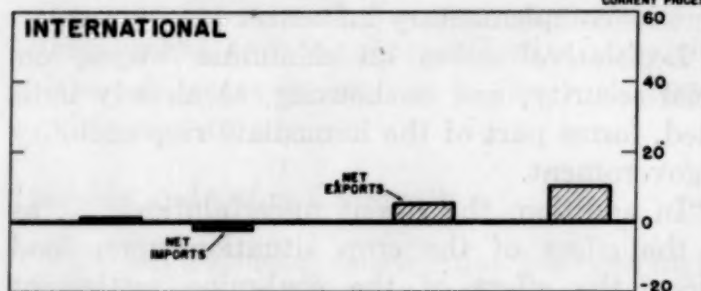


BILLIONS OF DOLLARS
CURRENT PRICES

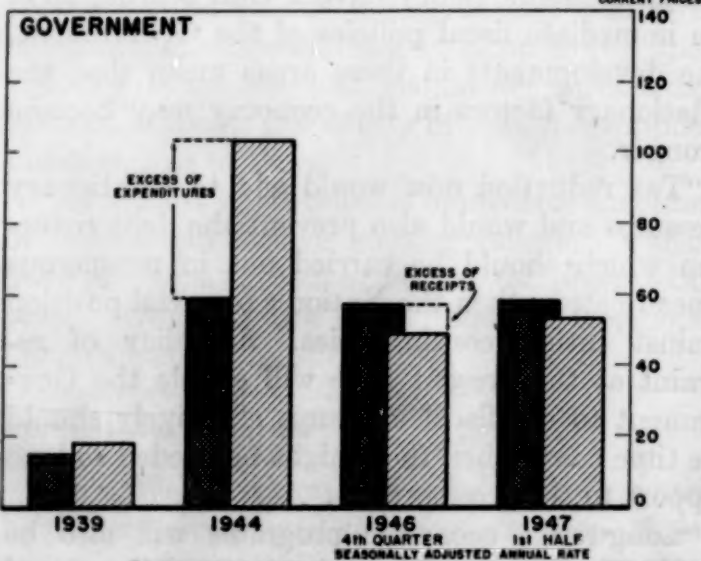


UNITED STATES DEPARTMENT OF LABOR
BUREAU OF LABOR STATISTICS

BILLIONS OF DOLLARS
CURRENT PRICES



BILLIONS OF DOLLARS
CURRENT PRICES



*THE COMPONENTS DO NOT ADD EXACTLY TO THE GROSS NATIONAL PRODUCT BECAUSE OF CERTAIN ADJUSTMENTS.
Source: BASED ON REVISED SERIES OF NATIONAL INCOME AND GROSS NATIONAL PRODUCT

danger that domestic receipts and expenditures, at current price levels, may not be sufficient to support a full-employment national product when exports return to more nearly normal proportions.

Revised Estimates of National Income and Products

THE BASIC and comprehensive revision of the national income and product statistics of the United States Department of Commerce, in preparation for more than 5 years, have recently been released.¹ The revision raises the 1946 national income figure by 13 billion dollars, or about 8 percent. The revised data make available a detailed and internally consistent set of estimates, which will facilitate over-all analyses of the economy.

The objectives of the revision were "(1) to complete the setting up of the whole body of national income statistics as an interrelated and consistent system of national economic accounting; (2) to improve the statistical procedures used in estimating all the series and to base them on the latest source data; and (3) to incorporate a number of changes in the basic aggregates so as to achieve more generally useful and clear-cut definitions of national income and national product."

The two major types of revisions which follow from these objectives are due to different definitions of what is included and what is excluded from the various series (i. e., conceptual changes) and the use of more accurate source material or better estimating procedures (i. e., statistical changes). The new concepts in general include more than formerly, so that the changes in the estimates of national income are upward on this account. The statistical revisions for recent years raise the former series still further.

In considering these changes in concept, it is

¹ Survey of Current Business, supplement to July 1947 issue: National Income and Product Statistics of the United States, 1929-46.

useful to recall a few of the basic ideas underlying this type of measure. All measures of national income or product, no matter how defined, attempt to do two things: to estimate the current value of the final output of an economy and to estimate the distribution of that value among the various factors of production. The concept of "final output" corresponds roughly to the concept of "ultimate consumer." Goods purchased by an ultimate consumer, such as houses or canned tomatoes, are final products, of which the value is included in an estimate of national product. On the other hand, goods purchased solely for incorporation in final products, such as lumber or tin cans, are intermediate products and are not included in the estimate of national product. Since there is no all-purpose definition of an ultimate consumer or of a final product, different definitions of national income and product are possible. Thus, all capital equipment produced during a year can be considered as final product. Alternatively, capital equipment replacing worn-out equipment can be considered as intermediate product. In the latter case, only capital equipment not required for replacement is considered final product.

By far the most difficult problem that arises in defining final product is the treatment of government. It is clear that many of the services supplied by government, such as education, would be treated as final product, if supplied by a private business. It is desirable therefore to treat such government services as final product. It is also clear, however, that many of the services supplied by government are used by businesses engaged in producing final products, i. e., they are intermediate products. Highways for business use are entirely analogous in this respect, for example, to railroads. Different ways of valuing the final output of government will consequently result in different definitions of national income and product.

Most of the major differences in concept between the old and new series and between the different concepts of national income in the new series are attributable to different definitions of final product, both private and government.

Gross National Product

The revised gross national product includes the following components:

(1) Personal consumption expenditure, which consists of the value, at market prices, of all goods and services purchased by individuals and non-profit institutions, and the imputed value of some goods and services, such as homegrown food, which do not appear on the market place.

(2) Private gross domestic investment, which covers the value, at market prices, of all capital goods purchased by private business and nonprofit institutions, and the value of the change in in-

ventories held by them. It covers all private new dwellings.

(3) Net foreign investment, which measures the excess of exports over imports, including in the concept of exports and imports not only merchandise but also net payments of interest, dividends, and cash contributions.

(4) Government purchase of goods and services, which measures the value of "government output." It consists of two components, net purchases from business and abroad and compensation of employees.

The movement of each of these components from 1929 to 1946 is summarized in table 1.

TABLE 1.—Gross national product or expenditure, 1929-47

[Billions of dollars]

Year	Gross national product	Personal consumption expenditures	Gross private domestic investment	Net foreign investment	Government expenditure for goods and services			Private gross national product
	(1)	(2)	(3)	(4)	Total	Net purchases from business and abroad	Compensation of employees ¹	(8)
	(2)+(3)+(4)+(5)				(5)	(6)	(7)	(1)-(7)
1929	103.8	78.8	15.8	0.8	8.5	4.1	4.4	90.4
1930	90.9	70.8	10.2	.7	9.2	4.6	4.6	86.3
1931	75.9	61.2	5.4	.2	9.2	4.5	4.7	71.2
1932	58.3	49.2	.9	.2	8.1	3.6	4.5	53.8
1933	55.8	46.3	1.3	.2	8.0	3.2	4.7	51.1
1934	64.9	51.9	2.8	.4	9.8	4.1	5.6	59.3
1935	72.2	56.2	6.1	-.1	9.9	3.9	6.0	66.2
1936	84.7	62.5	10.5	-.1	11.7	4.5	7.3	77.4
1937	90.2	67.1	11.4	.1	11.6	4.7	6.9	83.3
1938	84.7	64.5	6.3	1.1	12.8	5.1	7.6	77.1
1939	90.4	67.5	9.0	.9	13.1	5.4	7.6	82.8
1940	100.5	72.1	13.0	1.5	13.9	6.1	7.8	92.7
1941	125.3	82.3	17.2	1.1	24.7	15.3	9.4	115.9
1942	159.6	90.8	9.3	-.2	59.7	44.4	15.2	144.4
1943	192.6	101.6	4.6	-2.2	88.6	62.7	25.9	166.7
1944	210.6	110.4	5.7	-2.1	96.6	63.6	32.9	177.7
1945	213.1	121.7	9.1	-.8	83.1	47.3	35.8	177.3
1946	203.7	143.7	24.6	4.8	30.7	9.4	21.2	182.5
1947: First half ²	224.1	157.9	29.2	9.9	27.1	10.0	17.1	207.0

¹ Military and civilian.

² Seasonally adjusted annual rates.

The major conceptual revisions in this series have been (1) to add the net imputed rental value of, depreciation of, and taxes on, owner-occupied dwellings to personal consumption expenditures; and (2) Government output has been redefined to exclude the value of government interest payments (4.5 billion dollars for 1946) and government subsidies, and to include government contributions to military family allowances and life insurance as well as income in kind of the armed forces. The major statistical revision has been in the estimates of personal consumption expendi-

ture, for which direct estimates are now available.

Gross national product, considered from the point of view of these components, is referred to as "gross national product from the expenditure side." Consideration of how this product is distributed among the various factors of production, is usually referred to as "Gross national product from the income side." The two totals are, of course, always equal. The distribution of the private gross national product in 1946 among the various factors of production is shown in the tabulation following.

	Billions of dollars
Private gross national product.....	182.5
Compensation of employees ¹	95.6
Income of unincorporated enterprises.....	35.0
Income of incorporated enterprises ²	7.9
Income of government:	
Corporate tax liability.....	8.6
Indirect business taxes and nontax li- ability.....	16.9
Net rents and interest.....	10.0
Capital consumption allowances ³	11.0
Business transfer payments ⁴5
Adjustments ⁵	-2.9

¹ Excludes government compensation.

² After corporate profits taxes and after adjustment for inventory valuation (see table 2).

³ Includes depreciation allowances, accidental damage to fixed capital, and capital outlays charged to current expense.

⁴ Bad debts, gifts, unrecovered thefts, cash prizes, etc.

⁵ Statistical discrepancy plus government subsidies minus current surplus of government enterprises.

The compensation of employees amounted to approximately one-half the private gross product in 1946, a ratio that has not varied substantially over the entire period for which data are available.

National Income

The national income concept of the Department of Commerce differs from the gross national product concept because of a redefinition of final product. The three major differences between the two concepts are (1) the substitution of a net for a gross product by eliminating capital equipment purchased for replacement (as measured by capital consumption allowances) from the definition of final product; (2) valuing private output at prices differing slightly from market prices by excluding business transfer payments; and (3) valuing government output differently by excluding indirect business taxes and including the value of subsidies. Thus, the Department of Commerce refers to national income as a measure of "the total factor costs of the goods and services produced by the economy." The movement of this series is summarized in table 2.

The major conceptual changes in the definition of national income in addition to those introduced into gross national product are the inclusion of corporate profits tax liability and the adjustment for inventory valuation.

TABLE 2.—National income, by distributive shares, 1929–47

[Billions of dollars]

Year	Total national income	Compensation of employees ¹	Income of unincorporated enterprises				Income of incorporated enterprises and inventory valuation adjustment						Net rent and interest
			Total	Farm	Non-farm	Non-farm inventory valuation adjust- ment	Total	Corporate profits				Inventory valuation adjust- ment ²	
								Before taxes	After taxes				
									Total	Divi- dends	Undis- tributed profits		
1929.....	87.4	50.8	13.9	5.7	8.1	0.1	10.3	9.8	8.4	5.8	2.6	0.5	12.4
1930.....	75.0	46.5	11.0	3.9	6.3	.8	6.6	3.3	2.5	5.5	-3.0	3.3	11.0
1931.....	58.9	39.5	8.2	2.9	4.7	.6	1.6	- .8	-1.3	4.1	-5.4	2.4	9.6
1932.....	41.7	30.8	4.9	1.7	2.9	.3	-2.0	-3.0	-3.4	2.6	-6.0	1.0	7.9
1933.....	39.6	29.3	5.2	2.3	3.4	-.5	-2.0	.2	-4	2.1	-2.4	-2.1	7.0
1934.....	48.6	34.1	6.6	2.3	4.3	-.1	1.1	1.7	1.0	2.6	-1.6	-.6	6.8
1935.....	56.8	37.1	9.9	4.9	5.0	-.1	3.0	3.2	2.3	2.9	-.6	-.2	6.8
1936.....	66.9	42.7	12.2	6.1	6.2	-.1	4.9	5.7	4.3	4.6	-.3	-.7	7.2
1937.....	73.6	47.7	12.2	5.6	6.7	(³)	6.2	6.2	4.7	4.7	(³)	(³)	7.5
1938.....	67.4	44.7	10.8	4.4	6.1	.2	4.3	3.3	2.3	3.2	-.9	1.0	7.6
1939.....	72.5	47.8	11.3	4.5	6.9	-.2	5.8	6.5	5.0	3.8	1.2	-.7	7.7
1940.....	81.3	51.8	12.7	4.9	7.8	-.1	9.2	9.3	6.4	4.0	2.4	-.1	7.7
1941.....	103.8	64.3	16.5	6.9	10.2	-.6	14.6	17.2	9.4	4.5	4.9	-2.6	8.4
1942.....	136.5	84.7	22.7	10.6	12.5	-.4	19.8	21.1	9.4	4.3	5.1	-1.3	9.2
1943.....	168.3	109.1	26.0	11.8	14.3	-.1	23.7	24.5	10.4	4.5	5.9	-.8	9.5
1944.....	182.3	121.2	27.7	12.4	15.4	-.1	23.5	23.8	9.9	4.7	5.2	-.4	9.9
1945.....	182.8	122.9	30.2	13.5	16.8	-.1	19.7	20.2	8.9	4.8	4.2	-.5	10.1
1946.....	178.2	116.8	35.0	15.2	21.0	-1.3	16.5	21.1	12.5	5.6	6.9	-4.7	10.0
1947: First half ⁴	198.5	125.4	39.9	17.8	(⁵)	(⁵)	22.9	28.2	17.0	6.2	10.8	-5.4	10.4

¹ Includes wage and salary payments of private employees, of government (including military), employer contributions for social insurance, and other labor income.

² The accounting procedures followed by most business enterprises will treat appreciation in the value of inventories during a year because of price rises as a source of profits, and depreciation as a source of losses. In national income and product measures which are concerned with the value of goods and services currently produced, income from this source is treated as a

capital gain and not as income from current production, so that a deduction from profits reported by business is required. In years of declining prices and depreciating values of inventories, estimated losses from this source are added back to profits.

³ Less than \$50,000,000 (negative).

⁴ Seasonally adjusted annual rates.

⁵ Not available.

Personal Income

Neither gross national product nor national income is a satisfactory measure of the actual flow of income to individuals. Both measures include certain forms of income, such as undistributed corporate profits which legally accrue to individuals but which they are not free to dispose of, and exclude certain other types of income usually referred to as transfer payments which constitute purchasing power but do not arise from the current production of goods and services. By adjusting national income on both counts the Department of Commerce obtains an income measure which more nearly reflects the current flow of purchasing power, personal income. This measure (shown in table 3) corresponds to the former concept of income payments. Finally, by deducting personal tax and nontax payments, the fourth basic income measure, disposable income, is obtained.

Behind these over-all aggregates lie a series of more detailed estimates also of considerable interest. As an example, table 4 summarizes the

movement of average annual full-time earnings by major industry groups from 1929 to 1946.

TABLE 3.—Personal income, by source, 1929-47

[Billions of dollars]

Period	Total personal income	Wages and salary receipts	Other labor income	Proprietors' and rental income	Dividends	Personal interest income	Transfer payments ¹
1929.....	85.1	50.0	0.5	19.7	5.8	7.5	1.5
1930.....	76.2	45.7	.5	15.7	5.5	7.1	1.5
1931.....	64.8	38.7	.5	11.8	4.1	7.0	2.7
1932.....	49.3	30.1	.4	7.4	2.6	6.6	2.2
1933.....	46.6	28.7	.4	7.2	2.1	6.2	2.1
1934.....	53.2	33.4	.4	8.7	2.6	6.0	2.2
1935.....	59.9	36.3	.4	12.1	2.9	5.7	2.4
1936.....	70.6	41.6	.5	14.8	4.6	5.6	3.5
1937.....	74.0	45.4	.5	15.4	4.7	5.6	2.4
1938.....	68.3	42.3	.5	14.0	3.2	5.5	2.8
1939.....	72.6	45.1	.5	14.7	3.8	5.4	3.0
1940.....	78.3	48.9	.6	16.3	4.0	5.4	3.1
1941.....	95.3	60.9	.6	20.8	4.5	5.4	3.1
1942.....	122.2	80.5	.7	28.1	4.3	5.4	3.2
1943.....	149.4	103.5	.9	32.1	4.5	5.5	3.0
1944.....	164.9	114.9	1.3	34.4	4.7	6.0	3.6
1945.....	171.6	115.2	1.5	37.1	4.8	6.8	6.2
1946.....	177.2	109.2	1.6	41.8	5.6	7.7	11.3
1947: First half ²	191.3	117.7	1.8	47.0	6.2	7.8	10.8

¹ Includes benefits from social insurance funds, relief, military pensions, mustering out payments, veteran's readjustment allowances and business transfer payments.

² Seasonally adjusted annual rates.

TABLE 4.—Average annual earnings per full-time employee, by industry, 1929-46

Year	All industries	Agriculture, forestry, and fisheries	Mining	Contract construction	Manufacturing	Wholesale and retail trade	Finance, insurance, and real estate	Transportation	Communications and public utilities	Services	Government
1929.....	\$1,421	\$455	\$1,526	\$1,674	\$1,543	\$1,597	\$2,090	\$1,642	\$1,474	\$1,009	\$1,552
1930.....	1,380	429	1,424	1,526	1,488	1,568	2,001	1,610	1,497	1,058	1,554
1931.....	1,292	352	1,221	1,233	1,369	1,497	1,886	1,549	1,514	1,002	1,649
1932.....	1,136	272	1,016	907	1,150	1,318	1,687	1,373	1,438	914	1,479
1933.....	1,064	253	990	869	1,086	1,187	1,591	1,334	1,351	850	1,330
1934.....	1,109	288	1,108	942	1,153	1,232	1,635	1,393	1,426	852	1,286
1935.....	1,153	328	1,154	1,027	1,216	1,281	1,668	1,492	1,486	868	1,293
1936.....	1,199	358	1,263	1,178	1,287	1,299	1,747	1,582	1,522	893	1,281
1937.....	1,270	411	1,366	1,278	1,376	1,356	1,819	1,644	1,601	932	1,356
1938.....	1,238	401	1,282	1,193	1,296	1,357	1,762	1,676	1,674	938	1,338
1939.....	1,269	403	1,367	1,268	1,363	1,365	1,761	1,723	1,692	943	1,339
1940.....	1,306	415	1,388	1,330	1,432	1,391	1,754	1,754	1,718	949	1,349
1941.....	1,450	503	1,579	1,638	1,653	1,491	1,805	1,888	1,766	1,016	1,392
1942.....	1,719	649	1,755	2,194	2,023	1,626	1,918	2,181	1,881	1,131	1,647
1943.....	1,906	838	2,100	2,505	2,350	1,804	2,071	2,491	2,075	1,337	1,815
1944.....	2,120	983	2,499	2,602	2,517	1,965	2,203	2,677	2,248	1,517	1,961
1945.....	2,201	1,100	2,618	2,612	2,525	2,134	2,365	2,732	2,416	1,654	2,083
1946.....	2,357	1,223	2,677	2,581	2,512	2,392	2,567	2,937	2,560	1,842	2,346

Survey of Consumer Finances¹

IN THE TWO ANNUAL SURVEYS of consumer finances sponsored by the Federal Reserve Board, statistical information is provided which was hitherto lacking or available only in fragmentary form. Data have been collected concerning (1) distribution of income and of ownership of liquid assets; (2) consumer intentions to purchase durable goods and houses and consumer appraisals of future income, prices, and economic conditions. Even though the method of compilation is experimental and some of the data (such as reports of intentions and attitudes) are subjective, these surveys provide certain clues to economic trends and are important in analyzing the factors underlying consumer demand.

Expenditures for Durable Goods and Investments

The number of spending units² which bought consumer goods and houses in 1946 closely approximated the number that, in last year's survey, indicated intentions to buy such goods. The close results were obtained, however, because of offsetting intentions not carried out by different groups of consumers. While some prospective purchasers did not carry through their intention, or purchased used, rather than new, durables and houses, many others who did not plan to purchase at the beginning of 1946 did so before the year was over.

About a third of the purchase price of the durable goods bought in 1946 was drawn from previously accumulated liquid assets; about a fifth was borrowed; and trade allowances and current

income accounted for the rest. In buying houses about one-half the purchase money was obtained from mortgages. The intended methods of financing proposed purchases of durables in 1947 are very similar to the plans for such financing as stated by prospective purchasers in 1946. Actual financing of purchases in 1946 departed somewhat from the expressed plans at the beginning of the year, with a relatively greater number of buyers paying full cash and fewer using installment credit.

TABLE 1.—Distribution of consumer intentions to buy in 1946 and 1947 and of actual purchasers in 1946, by income group¹

Type of purchase	Prospective and actual purchasers as a percentage of all spending units within each income class					
	All income groups	Less than \$1,000	\$1,000 to \$1,999	\$2,000 to \$2,999	\$3,000 to \$4,999	\$5,000 and over
<i>Automobiles</i>						
Expected to buy in 1946.....	11	3	8	11	16	26
Bought in 1946.....	11	2	9	13	11	20
Plan to buy in 1947.....	12	4	6	12	18	24
<i>Other² selected durable goods</i>						
Expected to buy in 1946.....	28	14	25	32	34	38
Bought in 1946.....	28	14	25	32	36	35
Plan to buy in 1947.....	21	9	17	24	28	26
<i>Houses</i>						
Expected to buy in 1946.....	8	4	7	9	9	11
Bought in 1946.....	7	3	6	7	8	13
Plan to buy in 1947.....	6	1	6	6	8	9

¹ Intended purchases for the year 1946 were ascertained in the survey made early in 1946. Actual purchases during 1946 and intended purchases for 1947 were ascertained early in 1947. In every case, the percentage of people expecting to buy includes those who said definitely they would buy and those who said they probably would do so. Intended purchases in 1946 are related to 1945 income, and actual purchases in 1946 and intended purchases for 1947 to 1946 income.

² Refrigerators, furniture, radios, washing machines, etc.

Consumers do not intend to buy as much durable goods, other than automobiles, in 1947 as they indicated in last year's survey they intended to buy in 1946. High prices and the expectation that they will come down appears to have reduced somewhat the demand for some of these items. This is particularly true with regard to the purchasing of homes. On the other hand, the demand for new cars at the beginning of 1947 was as great as that of a year earlier. While consumer demand continued strong in the spring of 1947, the course of prices may significantly modify actual performance as compared with intentions to buy. It should be remembered that when the survey was conducted, 46 percent of the units

¹ In early 1946 the Division of Program Surveys of the Department of Agriculture made a survey of liquid asset holdings, spendings, and saving for the Federal Reserve Board, the results of which were published in the June, July, and August 1946 issues of the Federal Reserve Bulletin. The present survey, carried out by the Survey Research Center of the University of Michigan for the Board, covers similar questions and permits an evaluation of the effectiveness of appraising consumer's stated intentions to purchase durables. The results of the 1947 survey have also been published in three parts in issues of the Federal Reserve Bulletin. The present summary covers Parts I and II.

² A spending unit is defined as all persons living in the same dwelling and belonging to the same family, who pool their incomes to meet their major expenses. Many families had 2 or more spending units since within a family any person not pooling his income with the family was considered a separate spending unit, unless he was under 18, earned less than \$10 per week or contributed more than half his income. Some of the data in the present study have been tabulated for both spending and family units.

TABLE 2.—Consumer expectations concerning the general economic outlook, incomes, and prices

Expectations	Percentage distribution of all spending units	
	1946 ¹	1947 ²
<i>General economic outlook³</i>		
Good times ahead.....	35	55
Uncertain, no change.....	23	21
Bad times ahead.....	36	22
Not ascertained.....	6	2
All cases.....	100	100
<i>Own incomes⁴</i>		
Income will be larger than in preceding year.....	25	26
Income will be about the same.....	34	42
Income will be smaller than in preceding year.....	23	12
Uncertain, "it depends".....	13	18
Not ascertained.....	5	2
All cases.....	100	100
<i>Price changes⁵</i>		
Will go up.....	53	13
Will remain the same.....	21	22
Will go down.....	8	46
Conditional answers.....	13	17
Not ascertained.....	5	2
All cases.....	100	100

¹ Based on interviews in January-March 1946 (first survey).² Based on interviews in January-March 1947 (second survey).³ The question was: "Considering the country as a whole, do you think we will have good times or bad times or what during the next year or so?"⁴ Farm operators were not asked their income expectations in the first survey; consequently they are excluded from the compilation of these answers.⁵ The question was: "What do you think will happen to the prices of the things you buy during the next year—do you think they will go up or down or stay about like they are now?"

TABLE 3.—Consumer attitudes toward selected purchases in 1946 and 1947

Type of product and attitude toward purchase	Percentage distribution of all spending units	
	1946	1947
<i>Automobiles:</i>		
Will buy.....	8	8
Will probably buy.....	3	4
Undecided, "it depends".....	2	3
Will not buy.....	84	84
Not ascertained.....	3	1
All cases.....	100	100
<i>Other selected durable goods:</i>		
Will buy at least one item.....	22	14
Will probably buy.....	6	7
Undecided, "it depends".....	5	5
Will not buy any item.....	63	72
Not ascertained.....	4	2
All cases.....	100	100
<i>Houses:¹</i>		
Plan to build or buy a house.....	6	4
Will probably buy.....	1	2
Undecided, "it depends".....	2	3
Will not buy.....	83	89
Not ascertained.....	8	2
All cases.....	100	100

¹ Old as well as newly built houses on the part of the nonfarm population.

interviewed expected prices to go down and 22 percent expected them to remain the same, while only 13 percent expected them to go up.

Consumer Incomes and Liquid Asset Holdings

About 70 percent of the spending units had some change in income between 1945 and 1946, increases being more frequent than decreases. It is estimated that income received by individuals residing in the continental United States and included in the population sampled in the survey, was at least \$10 billion greater in 1946 than in 1945. Substantial shifting to higher income groups among the spending units occurred during the year so that 60 percent of all units received annual incomes of \$2,000 or more in 1946 compared with 53 percent in 1945. The shift in income distribution, however, was entirely in favor of the highest tenth of the spending units, which increased its share of total income from 29 percent in 1945 to 32 percent in 1946, at the expense of the second, third and, fourth tenth. The median income for all units rose from about \$2,000 in 1945 to \$2,300 in 1946. Most of the shifting toward higher income levels was in the so-called white collar groups, the self-employed, and farmers. No significant change occurred in the annual incomes of production workers although hourly wage rates increased during the year.

TABLE 4.—Share of total money income received by each tenth of the Nation's spending units, when ranked by size of income, 1946 and 1945¹

Spending units ranked according to size of income	Percentage of total money income received before taxes				Amount of income of small- est-income receiver in group	
	By each tenth		Cumulative			
	1946	1945	1946	1945	1946	1945
Highest tenth.....	32	29	32	29	\$4, 850	\$4, 450
Second.....	15	16	47	45	3, 750	3, 500
Third.....	12	13	58	58	3, 100	2, 950
Fourth.....	10	11	69	69	2, 700	2, 450
Fifth.....	9	9	78	78	2, 300	2, 050
Sixth.....	7	7	85	85	2, 000	1, 700
Seventh.....	6	6	91	91	1, 500	1, 350
Eighth.....	5	5	95	96	1, 150	1, 000
Ninth.....	3	3	99	99	700	550
Lowest tenth.....	1	1	100	100	0	0

¹ The 1945 income data are based on interviews in January-March 1946 (first survey); the 1946 income data on interviews in January-March 1947 (second survey). It is possible that the proportion of income received by the highest tenth of income receivers is underestimated by several percentage points in both years. A sample of approximately 3,000 spending units having been used in both surveys, it cannot be expected that a completely representative sample of the highest dollar incomes was obtained.

NOTE.—Detailed figures may not add to cumulative figures because of rounding.

TABLE 5.—Percentage distribution of spending units, money income received, and liquid assets, by income groups, 1946 and 1945¹

Annual money income before taxes	1946			1945		
	Spending units	Income received	Liquid assets held ²	Spending units	Income received	Liquid assets held ²
Under \$1,000.....	17	3	5	20	5	7
\$1,000-\$1,999.....	23	12	11	27	16	14
\$2,000-\$2,999.....	25	21	17	23	23	17
\$3,000-\$3,999.....	17	20	16	15	20	16
\$4,000-\$4,999.....	8	13	12	7	12	10
\$5,000-\$7,499.....	6	11	13	5	11	13
\$7,500 and over....	4	20	26	3	13	23
All income groups.....	100	100	100	100	100	100

¹ Covers 1946 and 1945 money income before taxes and liquid assets held in early 1947 and early 1946. The 1945 income data and early 1946 liquid assets data are based on interviews in January-March 1946 (first survey), and the 1946 income data and early 1947 liquid assets data on interviews in January-March 1947 (second survey).

² Early 1947.

³ Early 1946.

Individual holdings of liquid assets covered by the survey—United States Government bonds, savings accounts, and checking accounts—increased by about 8 billion dollars during 1946, bringing total personal holdings of these liquid assets to about 130 billion dollars at the beginning of 1947. These figures do not include savings in the form of currency for which reliable data could not be obtained. For all spending units showing a net decline in liquid assets during 1946, the total reduction was about \$10 billion. Of this decline, about 40 percent was used to pay for living expenses and other consumption; about 20 percent for consumer durables; over 20 percent for housing; and nearly 20 percent was shifted to other, nonliquid forms of investment (securities, businesses, etc.)

TABLE 6.—Median amounts of money income and liquid assets of spending units, by income groups, 1946

Annual money income before taxes	Median income (in dollars)	Median liquid asset holdings ¹ (in dollars)	Median % holdings as a percentage of income
Under \$1,000.....	\$600	\$0	0
\$1,000-\$1,999.....	1,450	40	2
\$2,000-\$2,999.....	2,400	480	20
\$3,000-\$3,999.....	3,350	900	27
\$4,000-\$4,999.....	4,400	1,400	32
\$5,000-\$7,499.....	5,500	2,750	50
\$7,500 and over....	10,250	7,250	71
All income groups.....	2,300	470	20

¹ Includes holdings of all U. S. Government bonds, savings accounts, and checking accounts as of early 1947. Excludes currency holdings.

A somewhat increased proportion of liquid assets was held by the upper income groups and

somewhat less by the lower groups in early 1947 compared with 1946. On the whole, however, the increase in holdings of liquid assets was roughly proportionate to the holdings at the beginning of the year for each tenth of the spending units ranked either as to income or as to liquid asset holdings. The 10 percent of the spending units with annual incomes of \$5,000 or more held about 2/5 of all liquid assets, while 40 percent with incomes below \$2,000 held only about 15 percent of the liquid assets. About 3 million fewer spending units held government bonds in 1947, but this decrease was offset by the units which acquired savings or checking accounts during the year.

Paid Vacations and Sick Leave in Industry, 1945-46¹

ABOUT 3 OUT OF 4 MANUFACTURING establishments, by 1945-46, had formal paid vacation plans for plant workers after a year's service, and almost 9 out of 10 provided paid vacations for office workers with similar length of service. In contrast, formal plans for paid sick leave were uncommon both for plant and office workers. Typically, plant workers received a 1-week vacation with pay after a year's employment; office workers were allowed 2-week vacations in more than two-fifths of the establishments with vacation plans. Information available for the machinery industries indicated that after 5 years' service, 2-week vacations were most common for plant as well as for office workers.²

In contrast, paid vacations in 1937 were provided for plant workers by only 1 in 4 manufacturing establishments. Even at that time, however, about 8 out of 10 establishments granted vacations with pay to office and other salaried workers.³ Although extension of paid vacation plans from office to plant workers began prior to World War II, rapid progress was made during the war years. Under wartime wage stabilization, the National War Labor Board developed a vaca-

¹ Prepared by Edyth M. Bunn of the Bureau's Wage Analysis Branch.

² For further discussion of vacations in the machinery industries, see *Wages in the Machinery Industries*, October 1946, p. 317 of this issue.

³ Monthly Labor Review, August 1938, p. 209. The present study differs in coverage from the earlier survey, but it is believed that rough comparisons are warranted.

tion policy under which virtually automatic approval was given to the voluntary introduction of paid vacations of specified duration.⁴

The interest in vacations as an objective of collective bargaining is reflected in the rapid increase in the number of agreements providing vacations. In 1940, only about 25 percent of all workers under union agreement were entitled to paid vacations, as compared with 85 percent in 1944.⁵

Method and Coverage

Data for 1945-46 were collected as part of the Bureau's general wage surveys of 56 manufacturing and 7 nonmanufacturing industries.⁶ The manufacturing industries together employed about 5½ million workers, or more than a third of the entire manufacturing labor force of the country, and contained more than 34,000 establishments. The nonmanufacturing industries included 19,000 establishments having 1,300,000 employees.⁷

Although it is believed that the coverage of manufacturing industries is sufficiently large and representative to provide a rough picture of vacation and sick-leave practices for manufacturing as a whole, it should be borne in mind that the individual studies were made primarily to provide data for individual industries.⁸ Such important segments of manufacturing as basic iron and steel, lumber, printing, meat packing, and the rubber industries were not studied. Coverage of nonmanufacturing was limited to a few industries, so that no generalizations could be drawn for nonmanufacturing as a whole.

⁴ This automatic approval was limited to plans for 1 week of vacation after 1 year's employment and 2 weeks after 5 years. Further details regarding War Labor Board policies on vacation plans will be available in the forthcoming Termination Report of the National War Labor Board.

⁵ See Paid-Vacation Provisions in Union Agreements, November 1944, Monthly Labor Review, February 1945, p. 299.

⁶ The manufacturing industries studied are listed in table 2; the nonmanufacturing industries appear in table 1.

⁷ For the basis of this study, 15,500 manufacturing establishments employing slightly above 3 million workers and 6,400 nonmanufacturing establishments having 600,000 employees were actually surveyed. Establishments with less than 8 workers were omitted, except in a few industries where small establishments accounted for a substantial proportion of the industry's employment.

⁸ No attempt, moreover, has been made in the summary of paid vacations and sick-leave practices, presented in terms of number of establishments, to compensate for differences among industries in the proportion of establishments studied or for differences in coverage between segments of the same industry. As the individual industry surveys were made primarily to obtain wage-rate information, a larger proportion of large establishments and establishments in large cities and in certain regions were included in order to permit presentation of separate wage data by region, city, and size of establishment.

This article is intended to provide only a general picture of the prevalence of formal vacation and sick-leave plans and the amount of vacation provided after 1 year's service. It does not attempt to cover differing vacation provisions for workers who had been employed longer than a year.

Arrangements whereby workers were given vacations or paid wages during illness at the discretion of their employer or supervisor were not studied; these informal arrangements are particularly important with respect to sick leave.

Formal Paid Vacation Practices

Formal vacation plans tended to be most common in industries characterized by large operating units and high wage rates and, within the individual industries, were most frequently provided in large unionized establishments.

Manufacturing Industries: Among the major manufacturing industry groups for which data are available, the chemical industries provided vacations most commonly after 1 year's service and also tended to furnish the longest vacations (table 1). Although the metalworking industry group granted vacations somewhat less frequently than other industry groups, there was considerable variation among the separate industries within this group (table 2). The apparel trades,⁹ although ranking relatively high in paid vacations for plant workers, provided somewhat shorter vacations for office employees than did the other industries studied. Considering individual industries outside these major industry groups, the cigar, set-up box, structural-clay product, and furniture industries fell below the all-manufacturing average for formal vacation arrangements (table 2).¹⁰

⁹ Union agreements in the women's coat and suit and dress industries, particularly in the New England and Middle Atlantic regions, frequently provided that employers contribute a portion of the pay roll for a health and vacation fund. This fund was distributed among the workers according to a predetermined plan, which varied in details in the different markets.

¹⁰ The size of the interindustry differences in vacation provisions presented in the tables of this article was affected by the fact that the periods studied varied among industries (from January 1945 to July 1946), and that paid vacation plans were being extended during this period. The changes during the interval, however, were apparently not large enough to alter the relative position of the industries discussed in the text.

An example of the increase in vacation plans is provided by the machinery industries, which were studied in both January 1945 and October 1946. The proportion of machinery establishments having vacation plans for plant workers increased from 70 to more than 80 percent between the two periods, but there was no marked increase in the length of the vacation period provided.

TABLE 1.—Length of paid vacations after 1 year's service in selected manufacturing and nonmanufacturing industry groups 1945-46

Length of vacation	Manufacturing					Nonmanufacturing						
	All industries studied ¹	Apparel	Chemicals	Metalworking	Textiles	Automobile repair shops	Clothing stores	Department stores	Electric light and power	Limited price variety stores	Power laundries	Warehousing
<i>Plant workers</i>												
Establishments studied:												
Number.....	15,567	2,258	999	6,605	1,447	1,397	754	355	130	1,439	1,620	723
Percent.....	100	100	100	100	100	100	100	100	100	100	100	100
Percent of establishments with paid vacations after 1 year's service.....	73	81	92	68	75	76	94	97	98	95	45	73
Less than 1 week.....	2	1	1	4	1	(?)	(?)	(?)	—	1	2	—
1 week.....	65	63	70	61	73	67	67	79	46	87	43	67
Over 1 week but under 2 weeks.....	(?)	(?)	1	(?)	(?)	(?)	(?)	1	—	1	(?)	(?)
2 weeks.....	4	2	20	3	1	9	26	17	52	6	(?)	6
Over 2 weeks.....	(?)	(?)	(?)	(?)	—	—	1	(?)	—	—	—	—
Other ²	2	15	—	—	—	—	—	—	—	—	—	—
Percent of establishments with no paid vacations after 1 year's service.....	27	19	8	32	25	24	6	3	2	5	55	27
<i>Office workers</i>												
Establishments studied:												
Number.....	12,880	1,451	932	5,915	1,241	(?)	588	341	125	1,063	1,206	668
Percent.....	100	100	100	100	100	(?)	100	100	100	100	100	100
Percent of establishments with paid vacations after 1 year's service.....	87	83	95	86	88	(?)	94	97	100	98	69	89
Less than 1 week.....	1	(?)	(?)	1	(?)	(?)	(?)	(?)	—	1	1	—
1 week.....	47	56	38	42	55	(?)	64	78	38	88	60	46
Over 1 week but under 2 weeks.....	1	1	1	1	(?)	(?)	(?)	1	—	1	(?)	2
2 weeks.....	38	26	56	42	33	(?)	29	18	62	8	8	41
Over 2 weeks.....	(?)	(?)	(?)	(?)	(?)	(?)	1	(?)	—	(?)	—	(?)
Percent of establishments with no paid vacations after 1 year's service.....	13	17	5	14	12	(?)	6	3	—	2	31	11

¹ Includes other manufacturing industries not shown separately (see table 2.)² Less than $\frac{1}{100}$ of 1 percent.³ Establishments (in women's and misses' dresses and coats and suits) operating under union agreements which provide for a health-vacation fund into

which employers pay a determined percent of their pay roll and from which vacation payments are distributed. Also includes firms providing vacations to begin in 1947.

⁴ No coverage.

Nonmanufacturing Industries: Of the nonmanufacturing industries for which data were available, almost all department, clothing, and limited-price variety stores and electric light and power systems provided vacations for both plant and office workers after 1 year's service. On the other hand, less than half of the power laundries and under three-fourths of the warehousing establishments reported such plans for plant workers; 7 out of 10 power laundries provided paid vacations for their office employees. In 9 out of 10 warehouse establishments, office workers were granted vacations after 1 year (table 1).

Electric light and power was the only industry in which a 2-week vacation period after a year's service was more common than 1 week for plant workers. Among office workers, the 2-week period was more frequent than 1 week in the chemical industries, as well as in the electric utility industry; in the metalworking industries it was of equal importance with the 1-week vacation.

Regional Vacation Practices: The Southeastern and Southwestern regions¹¹ lagged behind other areas in paid-vacation practices in most manufacturing industries; the Pacific region ranked highest in the proportion of such plans. New England clothing and department stores granted 2-week vacations more frequently than 1-week periods; stores elsewhere generally followed the custom of 1-week vacations in effect in both manufacturing and nonmanufacturing industries. Although vacations were more common for office employees than for plant workers in almost all industries studied, this pattern was not found in every region, apparently because office workers were sometimes given vacations on an informal basis.

Sick Leave

Formal plans for paid sick leave for plant workers were found in less than 3 percent of the manufacturing establishments studied, although more

¹¹ For definition of regions, see *Wages in the Machinery Industries*, October 1946, p. 317 of this issue.

TABLE 2.—Extent of paid vacation plans for plant workers after 1 year's service in selected manufacturing industries, 1945-46

Industry group	Pay-roll period studied	Number of establishments studied	Percent of establishments having paid vacation plans after 1 year's service	Industry group	Pay-roll period studied	Number of establishments studied	Percent of establishments having paid vacation plans after 1 year's service
All manufacturing industries studied.....	Jan. 1945-July 1946	15,567	73	Metalworking—Continued			
Apparel.....		2,258	81	Oil-burners, hot-water and steam-heating apparatus.....	July 1946.....	68	87
Knit outerwear.....	July 1946.....	252	81	Power boilers.....	Jan. 1945.....	270	65
Knit underwear.....	July 1946.....	161	90	Radios.....	Jan. 1945.....	277	78
Men's and boys' dress shirts and nightwear.....	Apr. 1945.....	220	77	Sheet-metal work.....	Jan. 1945.....	384	28
Overalls and industrial garments.....	Apr. 1945.....	132	64	Small arms.....	Jan. 1945.....	72	86
Women's and misses' dresses.....	Apr. 1945.....	975	83	Stoves and ranges.....	July 1946.....	163	83
Women's and misses' suits and coats.....	July 1946.....	305	95	Tanks.....	Jan. 1945.....	10	100
Work pants, cotton.....	Apr. 1945.....	154	56	Tool and die jobbing (shops).....	Jan. 1945.....	619	66
Work shirts.....	Apr. 1945.....	59	54	Textiles.....		1,447	75
Chemicals.....		999	92	Cotton textiles.....	Apr. 1946.....	346	76
Chemicals, industrial.....	Jan. 1946.....	255	92	Hosiery, full-fashioned.....	Jan. 1946.....	187	67
Drugs and medicines.....	July 1946.....	258	93	Hosiery, seamless.....	Jan. 1946.....	205	59
Paints and varnishes.....	July 1946.....	291	94	Rayon and silk textiles.....	July 1946.....	237	89
Perfumes and cosmetics.....	July 1946.....	121	91	Textile dyeing and finishing.....	July 1946.....	193	88
Soap and glycerin.....	July 1946.....	74	85	Woolen and worsted textiles.....	Apr. 1946.....	279	83
Metalworking.....		6,605	68	Other industries.....		4,258	
Aircraft engines.....	Jan. 1945.....	199	77	Bakeries.....	July 1945.....	1,309	81
Communication equipment.....	Jan. 1945.....	46	78	Cigarettes.....	Jan. 1946.....	18	78
Copper alloying, rolling, and drawing.....	Spring-summer 1946.....	37	97	Cigars.....	Jan. 1946.....	197	52
Electric generating and distribution equipment.....	Jan. 1945.....	265	85	Corrugated-fiber boxes.....	Oct. 1945.....	170	88
Electroplating.....	Jan. 1945.....	252	52	Costume jewelry.....	Jan. 1946.....	94	76
Fabricated structural steel.....	Jan. 1945.....	323	63	Fiber cans and tubes.....	Oct. 1945.....	52	75
Foundries, ferrous.....	Jan. 1945.....	642	68	Folding boxes.....	Oct. 1945.....	187	76
Foundries, nonferrous.....	Jan. 1945.....	346	68	Footwear.....	Oct. 1945.....	345	86
Iron and steel forgings.....	Jan. 1945.....	167	77	Paper and pulp.....	Oct. 1945.....	208	88
Machine-tool accessories.....	Jan. 1945.....	156	75	Paperboard.....	Oct. 1945.....	111	86
Machine tools.....	Jan. 1945.....	181	82	Precious jewelry.....	Jan. 1946.....	123	89
Machinery (miscellaneous).....	Jan. 1945.....	2,013	69	Set-up boxes.....	Oct. 1945.....	283	62
Motor vehicles.....	Jan. 1945.....	115	78	Smoking, chewing, and snuff tobacco.....	Jan. 1946.....	31	77
				Structural clay products.....	Oct. 1945.....	328	45
				Upholstered furniture.....	Oct. 1945.....	288	56
				Wood furniture.....	Oct. 1945.....	514	57

than 8 percent granted sick leave to office workers. Chemical establishments led other manufacturing industries in formal sick-leave plans and also differed from other establishments in providing such leave more frequently for plant than for office workers. Sick leave was granted more frequently in the nonmanufacturing industries stud-

ied than in manufacturing. More than a half of the electric light and power systems regularly paid their workers for time lost while sick, and a third of all retail stores studied had plans in operation in 1945 and 1946. In view of the low incidence of formal sick leave plans in most industries, no tabulations are presented.

Work Stoppages, First Quarter of 1947

WAGES AND HOURS were major issues in slightly more than a half (56.6 percent) of 883 work stoppages beginning in the period January-March 1947 analyzed by the Bureau of Labor Statistics. Problems of union organization, recognition, and the closed or union shop were the principal issues in 132 stoppages, or about 15 percent of the quarter's total. About 1 strike in 20 arose over inter- or intra-union matters including sympathy demonstrations and jurisdictional disputes (table 1).

The mining and construction industries experienced slightly more than 100 work stoppages each during the first 3 months of 1947 (table 2). Eighty disputes were noted in retail and wholesale trade, and 67 in the transportation, communication, and public utilities group. Idleness was greatest in the machinery manufacturing industries. A substantial proportion of this total was caused by the prolonged controversy between the UAW-CIO and Allis-Chalmers, which was not terminated until late March 1947.

TABLE 1.—Major issues involved in work stoppages in the first quarter of 1947

[Figures not final; subject to change]

Major issues	Stoppages beginning in period				Man-days idle during period (all stoppages)	
	Number of stoppages	Percent of total	Workers involved		Number	Percent of total
			Number	Percent of total		
All issues.....	883	100.0	265,000	100.0	3,660,000	100.0
Wages and hours.....	368	41.8	137,000	51.5	1,540,000	42.2
Wage increase.....	250	28.3	75,300	28.4	832,000	22.7
Wage decrease.....	4	.5	1,880	.7	4,430	.1
Wage increase, hour decrease.....	19	2.2	10,500	3.9	106,000	2.9
Other.....	95	10.8	49,000	18.5	602,000	16.5
Union organization, wages, and hours.....	131	14.8	20,100	7.6	917,000	25.0
Recognition, wages, and/or hours.....	59	6.7	10,600	4.0	120,000	3.3
Strengthening bargaining position and/or wages and hours.....	15	1.7	3,320	1.3	498,000	13.5
Closed or union shop, wages, and/or hours.....	55	6.2	5,400	2.0	251,000	6.9
Discrimination, wages, and/or hours.....	2	.2	770	.3	47,800	1.3
Union organization.....	132	14.9	18,500	7.0	406,000	11.1
Recognition.....	80	9.0	8,170	3.1	281,000	7.8
Strengthening bargaining position.....	7	.8	2,410	.9	26,200	.7
Closed or union shop.....	19	2.2	1,550	.6	63,100	1.7
Discrimination.....	18	2.0	2,050	.8	20,000	.5
Other.....	8	.9	4,290	1.6	16,100	.4
Other working conditions.....	199	22.5	75,100	28.3	322,000	8.8
Job security.....	113	12.7	30,000	11.2	146,000	4.0
Shop conditions and policies.....	66	7.5	38,200	14.4	145,000	3.9
Work load.....	15	1.7	6,110	2.3	21,200	.6
Other.....	5	.6	1,170	.4	10,500	.3
Sympathy.....	14	1.6	9,060	3.4	38,100	1.0
Inter- or intra-union matters.....	46	5.2	13,800	5.2	453,000	12.4
Union rivalry or factionalism.....	16	1.8	2,590	1.0	59,500	1.6
Jurisdiction.....	16	1.8	2,130	.8	356,000	9.8
Not reported.....	7	.8	1,020	.4	17,800	.5

TABLE 2.—Work stoppages in the first quarter of 1947, by industry group

[Figures not final; subject to change]

Industry group	Stoppages beginning in period		Man-days idle during period (all stoppages)
	Number	Workers involved	
All industries.....	1 883	265,000	3,660,000
Manufacturing:			
Primary metal industries.....	40	15,400	131,000
Fabricated metal products (except ordnance, machinery, and transportation equipment).....	37	6,930	121,000
Electrical machinery, equipment, and supplies.....	18	8,850	36,900
Machinery (except electrical).....	48	11,600	812,000
Transportation equipment.....	25	29,900	126,000
Lumber and wood products (except furniture).....	21	2,340	44,000
Furniture and fixtures.....	15	1,230	50,300
Stone, clay, and glass products.....	16	3,070	48,400
Textile-mill products.....	17	7,740	144,000
Apparel and other finished products made from fabrics and similar materials.....	25	2,820	46,700
Leather and leather products.....	38	14,400	104,000
Food and kindred products.....	50	20,300	144,000
Tobacco manufactures.....	5	1,070	13,800
Paper and allied products.....	7	1,050	18,300
Printing, publishing, and allied industries.....	17	1,930	80,400
Chemicals and allied products.....	21	6,200	60,500
Products of petroleum and coal.....	7	4,370	46,000
Rubber products.....	15	17,000	40,300
Professional, scientific, and controlling instruments; photographic and optical goods; watches and clocks.....	15	2,380	19,800
Miscellaneous manufacturing industries.....	24	2,480	76,900
Nonmanufacturing:			
Agriculture, forestry, and fishing.....	5	1,550	28,900
Mining.....	111	27,800	215,000
Construction.....	101	29,300	437,000
Trade.....	80	17,700	351,000
Finance, insurance, and real estate.....	11	1,010	4,390
Transportation, communication, and other public utilities.....	67	15,500	173,000
Services—personal, business, and other.....	47	10,900	285,000
Other nonmanufacturing industries.....	2	350	3,900

¹ The total number of stoppages shown is less than the sum of the group figures which follow, because 2 strikes extending into 2 industry groups have

here been counted separately in each industry group affected, with allocation of workers involved and man-days idle to the respective groups.

Italy: Efforts To Create Employment¹

EARLY 1947 ESTIMATES indicated that there were some 2,500,000 unemployed persons in Italy, and that approximately 15 percent of the total population was affected by unemployment. Efforts to deal with the problem included a ban on dismissals in northern industry; the stimulation of agricultural employment; preference for war veterans; provision of employment on public works; and increased emigration. To the greatest possible extent, labor and management have agreed to adopt the 40-hour week in place of the longer workweek.

Ban on Dismissals: In late 1946 and early 1947, there were some 175,000 surplus workers above the requirements in their places of employment (principally in the northern mechanical industries),

¹ Information is from United States Embassy, Rome, Report No. 155, April 11, 1947, and Airgram No. 766, July 3, 1947, and other sources.

whose dismissal had been prohibited by a decree of August 1945.² Under this employment freeze, Government and industry contribute to a special fund (*Cassa di integrazione*) from which payments are made to partially employed workers on the basis of full pay for hours worked and two-thirds pay for any difference between the hours actually worked and 40 hours weekly. Industry is directly responsible for one-third of the total cost of maintaining the fund. The remaining two-thirds have been provided by the Government, but it has never been clarified whether the Government payments constitute a grant or a loan to industry. Arrangements have been discussed for dismissing some surplus labor in various enterprises.

Stimulation of Agricultural Employment: Employment has been created in agriculture by empowering prefects in the provinces to assign unemployed migratory day laborers to farmers.

The distribution of land to agricultural workers, under terms of a decree of October 19, 1944,

² For detail, see Monthly Labor Review, September 1945 (p. 456).

may also be considered an employment measure. The decree permits cooperatives and associations of small farmers and workers to lease land not already under cultivation. By the end of 1946, the total leased land had reportedly increased to roughly 300,000 acres, principally in Sicily and Sardinia, Calabria, and Lazio. Assuming rather small individual holdings, the lands thus made available may have aided 50,000 to 75,000 workers to gain a livelihood.

Preference for War Veterans: To assist war veterans (who have no reemployment rights in Italy) a decree of February 1946 compelled each private firm with more than 10 workers to employ war veterans in the proportion of at least 5 percent of the total number of workers employed by the firm on December 31, 1945. The same percentage of positions in Government service must be opened to veterans.

Employment on Public Works: Activity in public works reached a high level during 1946 and will probably break all previous records in 1947. During the 1945-46 fiscal year, about 173 billion lire, or three-eighths of the total Government budget, were appropriated for public works. Average daily employment on public works in December 1946 was 246,672, compared to 117,633 in January 1946, and 75,847 for the year 1945. A spot check made in December 1946 revealed that, in addition to those on regular Government projects, close to 100,000 workers were employed privately in the repair or reconstruction of housing alone. Funds for such work are contributed in part by the State.

Increasing Emigration: The emigration of workers during 1946, according to official records, did not exceed 25,000 persons. More than 15,000 reportedly went to Switzerland, about 4,000 to France, 3,500 or more to Belgium, and about 1,750 to the United States. According to the report of April 11, illegal emigration was probably large.

On the basis of emigration agreements already reached with a number of countries, as many as 250,000 Italian workers may be able to establish themselves abroad during 1947, if transportation is available and various administrative problems are solved. The agreement with France would permit a total of 200,000 emigrants in 1947; that

with Argentina about 60,000 annually for the next 5 years; with Belgium up to 50,000 persons; with Czechoslovakia some 5,000 farm laborers; and with Great Britain about 2,000 metal workers. Since Italy's surplus manpower is largely unskilled, the practical problem is often to find the proper emigrants.

Emigration has been encouraged by the Italian Government and the General Confederation of Labor. The emigration of large groups is preceded by Government-to-Government agreement on pay, treatment of workers, remittances to families in Italy, protection of individual interests abroad, etc. Individual contracts are also usually required, although this and some other provisions were waived for emigrants to Argentina.

Distribution of Unemployed: Of the 2,500,000 persons estimated to be unemployed early in 1947, those registered with the Italian Government Labor Offices were distributed by major industrial groups as shown in the accompanying table.

Number of registered unemployed in Italy, by industrial group, selected periods, 1946-47

Date	Number of registered unemployed				
	Total	Agriculture	Industry	Commerce	Miscellaneous
1946: January.....	1,428,101	308,022	752,961	131,330	235,788
April.....	1,467,678	307,355	814,900	107,011	238,412
July.....	1,683,077	286,451	955,522	126,934	314,170
October.....	1,946,026	352,503	1,050,617	160,538	382,368
1947: January.....	2,227,866	484,124	1,157,087	155,625	431,030
March.....	2,177,489	393,985	1,179,673	162,121	441,710
April.....	2,169,376	367,884	1,171,651	164,393	465,448

Japan: Labor Aspects of the Economic Emergency Program ¹

AN EIGHT-POINT PROGRAM was announced by the coalition Japanese Government on June 11, 1947, designed to cope with the grave economic crisis in that country. The program, which was prepared by the Coalition Cabinet, headed by Tetsu Katayama, chairman of the Social Democratic Party, covers a broad range of economic and social questions including wage-price policy.

¹ Data are from the text of the Program as transmitted by the U. S. Political Adviser in Report No. 1112 of June 14, 1947, and upon Japanese broadcasts and press news.

Character of Program

Parts of the program deal with problems which concern the whole Japanese population, such as the improvement of food collection and food distribution, the inauguration of a sound financial policy, and the promotion of a Japanese export program. Other points of the Government program directly affect Japanese labor. Section III provides for a revision of the whole price and wage structure; section V deals with the increase of production and productivity; and finally section VI announces "measures for securing life and employment of working people."

Revision of Price and Wage Structure: The need for stabilization of the wage-price structure had been indicated clearly by General MacArthur in a letter to the previous Cabinet on March 22, 1947. The Coalition Government expressly referred to this letter in the introduction of its program. According to section III of its program, the intentions of the Katayama Government in this field are, mainly, (1) to make a new determination of official prices, based upon the actual costs of production; (2) to limit public price subsidies to cases in which they are required from the over-all economic point of view; (3) to determine money wages simultaneously with the revision of official prices and, in doing so, to consider the quantity of consumer goods rationed through official channels; (4) to direct every effort towards maintaining real wages by enlarging the sphere of distribution of goods through official channels; and (5) to avoid mechanical measures, such as wage freezes.

Increase in Production and Productivity: The Government announced its intention to prepare a long-term economic program for the reconstruction of Japan. Planning and execution of such a program is to be carried out in close collaboration with the Economic Rehabilitation Conference, a voluntary national organization established jointly at the beginning of 1947 by organized labor and employers. Increasing the production of coal and other basic materials and strengthening of land and water transportation will have the highest priority in the reconstruction program.

The Government recognizes that productivity is low in many enterprises because they are heavily burdened with surplus workers—particularly in

Government-owned enterprises. Measures will be taken for the reallocation of these workers.

Security for Working People: Measures for the protection of the life and employment of working people are motivated by humanitarian considerations and also by the Government's assumption that such measures are essential to higher labor efficiency and greater industrial productivity, and that therefore they should be put into effect "even at the expense of scarce national strength."

Among the measures in this category are: (1) Government action intended to secure necessary consumer goods and housing for labor; (2) promotion of methods of wage payment apt to encourage labor efficiency and labor morale; (3) efforts for the creation and expansion of productive employment, particularly in export industries, and in public works of a productive type; (4) improvement of the public employment service and of the vocational training system; and (5) prompt establishment of an unemployment compensation system.

Nationalization and Cooperatives: The Government concluded the program by announcing as "supporting measures":

(1) The introduction of controls over enterprises in key industries basic to economic reconstruction, which "cannot attain their expected goal on account of reasons inherent to the private enterprise system, such as apprehension for big risk" (sic). In such cases the Government will take "direct responsibility" in the management of the enterprises, but "respect the status and technical ability of the existing employees."

(2) The encouragement of production cooperatives constituted by workers.

The Government's "White Paper"

The Economic Program of June 11, 1947, was followed on July 4 by an official white paper presenting to the Japanese people their critical economic situation. According to an official Japanese release, "this is the first white paper ever to be published by a Japanese Government, and it is the first time the Japanese people as a whole have ever been informed of the 'state of the nation' through statistics and detailed information which in the past were hidden in the desks of Government officials."

The white paper discussed the national economy in terms of (1) the state of Government; (2) the state of individual industrial enterprises; and (3) the economy of each individual. Each category was stated to be in the "red", with the Government increasing its 1946 deficit by 5 billion yen every month, coal mine operators (an example of private entrepreneurs) losing 267 yen for every ton of coal they produce, and the average individual having a deficit of about 400 yen a month.

In its detailed statements the white paper reported that—

(1) Current household expenses were about 60 to 70 times higher than comparable expenditures in 1937, while the average wage of an industrial worker was only about 23 times higher, and the average wage for coal miners 37 times that of 1937.

(2) The rationing system provides only for an average of 1,100 calories and 30 grams of protein per day, compared with average Japanese requirements of 2,150 calories and 75 grams.

(3) In prewar days the average Japanese consumed about 11.2 pounds of textile goods for clothing per year, while this year it will be difficult to supply an average of 1 pound.

(4) The index of industrial production in April 1947 stood at 30 (1935-37=100). Employment, however, had maintained its prewar level. The white paper explains this decline in output per man by "the drop of quality in raw materials, inefficient operation resulting from damaged facilities; lack of discipline on the part of workers; and decline in the technical skill of labor." The white paper assumes that the restoration of prewar productivity would result in total unemployment of approximately 10 million workers.

Government Action on Wages and Prices

Simultaneously with the release of the white paper, the Government announced wage standards for workers in various industries, in accordance with its own plan, after having failed to arrive at an agreement with the respective unions. These standards are not minimum or maximum wages, but are merely to guide management and labor in their wage decisions. They are "based on such actual wages as have the strongest influence over the industry involved at present, and as have been agreed upon lately through bargaining between labor and management."

The standard rates fixed by the Government range from 1,124 yen per month for workers in the reeling industries to 2,400 yen per month in shipping and transportation. A general industrial average was fixed at 1,800 yen per month. This may be compared with an actual all-manufacturing average of 1,087 yen for male workers and 457 yen for female workers in March 1947, the latest month for which such data are available.²

On July 5, the Government also started the publication of revised price lists for food, other basic commodities, and essential service charges. According to an official statement, the new prices of products of the mining and manufacturing industries are, in principle, fixed on the basis of cost. However, a "price stabilization zone" is established for basic commodities; the upper limit to new prices set at 65 times the corresponding prices between 1934 and 1936. If the producers' price of a basic commodity rises above the "price stabilization zone," as it does for instance for coal, the consumers' price will be reduced by means of price adjustment subsidies. The prices of farm products were revised so as to maintain the 1934-36 ratio of these prices to prices of commodities purchased by farm households. This led to new consumers' prices for staple foodstuffs. The official price of rice for instance was raised to 99 yen per 10 kilograms instead of 36; the price of bread more than doubled.

In commenting on the wage-price features of the Government's program, the leaders of all major trade-union federations emphasized that the Japanese workers were not interested in higher money wages but wanted adequate real wages. As expressed by the leader of the greatest and most conservative organization, the National Federation of Labor Unions: "If the minimum standard of living is not guaranteed, the workers will not have any enthusiasm for economic rehabilitation." The program has not resulted in improved official food collection and distribution to the necessary extent, so that workers are forced to continue buying in the black market at much higher prices. Recently, the Government found it necessary to approve average wage rates for electrical workers almost 50 percent higher than the standard rate fixed on July 5th. The stabili-

² Japanese Economic Statistics, General Headquarters Supreme Commander for the Allied Powers, No. 9, May 1947, p. 58. No official exchange rate exists between yen and dollar.

zation of prices and the achievement of other important parts of the Government program of June 11 are dependent upon the elimination of the basic causes of the present crisis—such as currency inflation, the low level of production and export, and the uncertainties connected with the reparations issue.

Norway: Adjustment of Labor Problems

DEVELOPMENT OF MACHINERY for the maintenance of industrial peace in Norway, discussed in an address delivered by Paal Berg¹ at the commencement exercises of the University of California on April 7, 1947, is summarized below:

Norway, in contrast to the larger industrial States of Europe, has never prohibited labor from organizing nor has its legislation prevented use of the collective work stoppage. Labor, therefore has never needed to fight for the right to organize and to strike. This, Mr. Berg believes is not attributable to a more tolerant outlook in regard to labor-capital conflicts, but to the nature of the economy. Until late in the nineteenth century Norway's people were largely farmers and fishermen; there was no manufacturing industry of any importance. Thus, the social problems which, in other lands, had been created by the factory system were absent.

Toward the end of the last century, the trade-union movement spread gradually among the industrial workers. While these trade-unions did not have to fight for legal status, they did have to struggle for employer recognition. Therefore, when in 1899 they organized the Norwegian Federation of Trade Unions, they felt it necessary to include public mediation and arbitration in their program. No other national labor organization exists.

State and municipal employees also have their trade-unions. Even the police are not legally prevented from striking. However, the policemen's organization, on its own initiative, renounced the

strike weapon in a written declaration to the government.

The centralization of labor unions on a nationwide base forced employers to follow suit, and the Norwegian Employers' Association made its appearance. The idea of organization has taken a firm hold in Norway, not only in industry but throughout the economy. Farmers and logging interests were the last to fall into line.

In 1911, when the most widespread labor-management dispute up to that time occurred, the problem of work stoppages suddenly became very real and Parliament asked the Government to draft a bill for the peaceful settlement of labor conflicts. As a result, Norway's first law providing for State control of labor disputes was passed in 1915.

The central organizations of labor and management had been in consultation with the Government and had agreed to the restrictions which were placed on the use of strikes and lock-outs. The two central organizations had thereby acknowledged that the maintenance of labor peace was an issue of public interest.

The law recognized the workers' struggle for better living conditions as an expression of a general human trend. The fundamental principle of the law is that the State must not limit the freedom of action of any of the parties without granting to them other appropriate means for the protection of their interests.

Two different categories of labor disputes are recognized in the law. The first group covers those rising from interpretation or application of collective agreements; and the second comprises those rising from the failure of collective bargaining.

Labor Courts

No doubt has existed in Norway as to the legal validity of collective agreements, which have the same force as other legal contracts. They play a dominant role in present-day Norway. With a population of little more than 3,000,000, the status of over 400,000 employees is influenced by collective agreements.

All disputes concerning collective agreements can be placed before the courts; but the procedure before the ordinary courts is not appropriate for disputes of this kind. Therefore, the law provided for a central court—called the labor court,

¹ Mr. Berg is a former Chief Justice of the Norwegian Supreme Court and was for many years chairman of the Norwegian Labor Court.

before which disputes involving the interpretation and application of collective agreements are heard. The court action is free of charge. The proceedings are conducted orally. Decisions have to be reached within the shortest possible time.

As the law provided the organizations with an instrument for settlement of their disputes, any attempt to solve this type of conflict through work stoppage was forbidden. As a result, a work stoppage no longer was a mere civil-law violation of the peace pledge of the collective agreement. To abstain from open conflict was made a public obligation. Transgression could lead to damage payments and other penalties.

The Labor Court has nation-wide jurisdiction. Its seven members are appointed by the King for a 3-year term. Two members, the chairman and one other, must have qualifications equal to those of a Supreme Court justice. Two members are to be appointed on recommendation by the Norwegian Employers' Association and two by the Norwegian Federation of Trade Unions. Thereby labor and management are given a decisive influence in the choice of Labor Court members, and the three neutral members are prevented from overlooking any points which might have a bearing on the decision. According to Mr. Berg's experience, this has been a good arrangement.

The Labor Disputes Act of 1915 stipulated a single court with nation-wide jurisdiction, because Norway was entering an entirely new legal field, and it was imperative to attain unified court decisions. Of late, however, the increasing number of cases has made it necessary to delegate minor cases to local labor courts.

The Labor Court has been functioning for over 30 years. All its rulings have been published. These rulings have, over a period of time, created a body of legal precedents of great social value.

The main organizations have always recognized their obligation to follow the legal course of action in their disputes over collective agreements. There have, however, been cases in which a local union has gone on an illegal strike to force the issue. The employer in such an instance may carry the case to the Labor Court to have the strike declared illegal and secure damages. The employer may threaten to place economic responsibility on the Norwegian Federation of Trade Unions, should it fail to halt the strike. At this point, the Labor Disputes Act places a

heavy responsibility on the Federation and the unions. To free themselves from this responsibility, both the local and central labor organizations must prove that they are in no way to blame for the strike, and that they have done everything in their power to get production under way again.

The Labor Court has, in many cases, succeeded in reconciling the parties. If the parties reach no agreement, the Court may hand down a decision that the strike is illegal. When the workers continued their strike, it was necessary to face the problem of obtaining compliance and getting workers back on the job. Employers have been reluctant to bring criminal court action against the strikers, which Mr. Berg considers a sound viewpoint. They have realized that prison sentences and fines will not create mutual good will and cooperation, and that, if every striker has to pay damages for employer losses, the judgment may be a source of discontent and irritation. This has caused the employers to look for other solutions.

A 1927 law also modified the former strict prohibition against the use of the work stoppage. If a work stoppage is not concluded within 4 days after the Court's ruling, the employers may ask the Labor Court's permission to use the lock-out in a counter move. Management, however, has never used this counter weapon.

Mr. Berg continued by saying the fact must be recognized that society may find itself powerless in the face of illegal work stoppages, which can develop from many causes. As Chairman of the Labor Court, Mr. Berg generally found that the workers, rightly or wrongly, claimed injury of one kind or another. As a result they went on strike to achieve their goal. More than once it was an injured sense of justice which caused them to strike—the desire for justice being one of the most forceful human drives.

The best way to avoid such situations is to have effective negotiating machinery ready at all times. Labor peace hinges largely on a certain feeling of confidence in the mind of the worker that his complaints can always be heard by the top management; that he can have an across-the-table discussion with management about these complaints; and that management will take the time to listen. The employee and employer organizations have tried to work out the negotiating machinery in such a way that misunderstandings and disputes

can be cleared up before they become rooted in the minds of the workers. One employer stated that he spent hours listening patiently to complaints by his workers and considered his time well spent because it paid good dividends.

Both parties show a greater desire to negotiate than they did during the troubled 1920's. Both parties have developed a greater skill in negotiation. Issues which can lead to conflict will always exist. Often these are mere trifles that can be settled without complicated legal machinery. Disputes may stem from disagreements between foremen and workers, or even from imagined injuries. Any of these causes may be termed insignificant by management, but for the individual laborer they can take on real dimensions and lead to ill-feeling if they are not settled at the outset. Mr. Berg has often seen trifling grievances turn peaceful and temperate workers into angry strikers. Under such conditions, the peace pledge of the collective agreement has little effectiveness.

Mediation

The second category of disputes covered by the Labor Disputes Act are those in which neither labor nor management is bound by a collective agreement. These are known as "conflicts of interest."

One of the law's fundamental precepts is that neither party shall call a work stoppage as long as there is a possibility of negotiation. The law stipulates that both strike and lock-out must be preceded by proper notice (usual period, 14 days), legally terminating the labor agreements.

Another provision requires the parties to accept mediation by an official body. Until this mediation has ended, neither party is allowed to use the work stoppage. Thus, if an organization decides to call a strike or lock-out, notice must first be sent to the State mediation authorities who in turn, may delay the work stoppage if they feel it might threaten vital public interests. But this applies only for a 10-day period, in which the mediator tries to find a solution. If mediation fails to show results, either one of the parties may demand that negotiations be broken off and may call a work stoppage following a 4-day period. This does not mean, however, that the mediation authorities simply drop the matter. While they can no longer delay a labor stoppage, they may at

any point call the parties in for new mediation. If the work stoppage continues for a month without a settlement, new mediation is instituted.

Public mediation, which is headed by a State Mediator with nation-wide jurisdiction, assisted by a staff of district mediators, has more than once helped labor and management. This has been recognized in all quarters. It has become a vital and valuable institution in the preservation of industrial peace and order. Whether or not a work stoppage is to be blocked, however, is a question which only the State Mediator himself can decide.

Some years before the Second World War, a new law authorized the mediator to act before the conflict had reached the point of a work-stoppage notice. Accordingly, the mediator has to keep his eye on labor relations all over the country. Previously the mediation authorities were not permitted to enter a conflict on their own initiative. They had to have a written statement that notice of termination had been given, and that a conflict was imminent. This meant that the mediation authorities often had to work under heavy pressure.

Compulsory Arbitration

The 1915 law was based on a bill presented to the Parliament by a Liberal Government. The Government then proposed that, if mediation brought no settlement and a work stoppage might imperil vital public interest, the State could demand settlement through compulsory arbitration. This brought forth a violent protest from labor, and the issue was dropped. The following year, however, the question of compulsory arbitration was raised again. Widespread wage conflicts were then threatening, and under the extraordinary conditions of World War I, both Parliament and Cabinet felt that a work stoppage could not be tolerated. A temporary law providing for compulsory arbitration was passed. This law was to continue only for the duration of the war, but because of unsettled labor conditions in the post-war period it was necessary to renew it several times. Both labor and management objected to these arbitration laws, but first one and then the other became interested in seeing the measures passed. Their attitude was largely dependent on the immediate status of the labor market.

The last great labor conflict took place in 1931. It was nation-wide, lasted for several months, and was extremely serious. One important result, however, was to drive home the conviction that repetition of such a large-scale struggle must be avoided at any cost.

Leaders on both sides are fully conscious of their responsibility for maintaining production. Just before World War II, the Parliament, with the silent agreement of both labor and management, passed a law providing for compulsory arbitration in settling a serious transport-workers dispute.

World War II and Postwar Periods

During the German occupation of Norway each and every labor stoppage was strictly forbidden. In September 1941, the workers in a large Oslo shipyard went on a strike to protest against an inadequate milk ration. The Germans declared a military state of emergency, and shot two of the leading union men, who had nothing to do with the strike.

Many labor leaders, who escaped to England and Sweden, began to prepare for Norwegian labor's role in the postwar era. In Sweden, they organized a Trade Union Federation branch office. Both the Federation chairman and the head of the Norwegian Employers' Association went to London. There they worked out a proposal to cover an adjustment of wage and working agreements for postwar Norway. The Norwegian Government in London gave this proposal the force of law. The principal point was that no conflict should be settled through work stoppage. Arbitration was to be substituted. This action was founded on a mutual understanding that the right to strike and lock-out had to give way before the nation's need for labor peace to rebuild the country.

It was intended that this peace agreement should be valid for only 1 year, but it has been extended. Following liberation, Norway made the most extensive revision of collective agreements in its labor history. The last revision had taken place several years before the war; nearly every contract was revised during 1946. The London agreement was a most fortunate step; it was in accordance with the spirit of the Norwegian people. Because of it, the whole series of negotiations was carried

off without a labor stoppage of any consequence. Collective agreements were settled through mediation and arbitration.

Since Norway was liberated in 1945 her people have realized that the basis of labor peace is good will and understanding. The feeling of unity which had developed during the Nazi occupation did not disappear once Norway was liberated. It was firmly expressed in a proclamation issued jointly by all the political parties in 1945, which states in part:

On the day that our land and our freedom, our old society of law, and our very cultural foundations were standing in mortal danger—it was on that day we realized we were one people, despite different outlooks and old antagonisms. This is an experience we wish to preserve—a living impulse to insure life and labor in Norway of tomorrow.

In the shadow of prisons, concentration camps and the firing squad there was born a comradeship which we had never known before—a capacity to cooperate which we never knew was ours.

All wage-labor is to be regulated in such a way that every conflict may be solved without strikes or lock-out.

In the past, organizations of labor and management were established as fighting units. But the present tendency on both sides is toward the stabilization of labor-management relations. These are organizations for social stabilization, and are far advanced on the road toward organized cooperation.

During the more quiet periods between contract revisions, the organizations are in constant touch with each other. They have become permanent and vital institutions of great value. Leaders on both sides know that the best guaranty against State interference is to settle their differences through voluntary agreement. The State, on the other hand, has often refrained from applying legal regulation when the organizations have declared themselves willing to settle their own problems. The State also makes extensive use of the central organizations as consultative bodies. Legally speaking, they are still private organizations. At the same time, however, they are charged with functions of a public-legal character, making them an indispensable cog in the social machinery. This development is still in progress.

Legislation Affecting Postal Workers

ANNUAL- AND SICK-LEAVE provisions concerning rural mail carriers are bettered by a recent amendment of the law of July 6, 1945, reclassifying salaries of Postal Service employees.

The 5-day week in effect for other carriers and for clerks does not apply to the rural carriers. For these workers, Saturday is a regular workday. Nevertheless, the 1945 law specified, in its section 6 concerning annual leave, that leave of absence with pay should be "exclusive of Saturdays, Sundays, and holidays," making no exception of rural carriers. This provision operated to prevent rural carriers from taking a paid vacation of as many as 6 consecutive workdays. It also prevented payment of sick leave for a Saturday included in absence from work on account of illness for a period of 6 consecutive workdays.

Public Law 44, approved April 30, 1947, amends the reclassification law of 1945 by adding to section 6 a paragraph which reads:

The authorized absence of a rural carrier on Saturdays which occur within or at the beginning or end of a period of sick or annual leave of 5 or more days' duration (or 4 days' duration if a holiday falls within or at the beginning or end of the period of sick or annual leave) shall be without charge to such leave or loss of compensation: *Provided*, That Saturdays occurring in a period of annual or sick leave taken in a smaller number of days may at the option of the carrier be charged to his accrued leave and when so charged he shall be paid for such absence.

Under this amendment it will be possible for rural carriers, when Saturday absence is authorized, to include a calendar week in a vacation period; and since the Saturday absence involved is not to be charged to annual leave, the number of days of leave expended in the week will not be greater than the number used by employees having a 5-day week. Sick-leave provisions are similarly improved. The amendment was made retroactive to February 1, 1947.

Another recent act (Public Law 211, approved, July 22, 1947) provides for payment to persons substituting for postmasters at fourth-class post offices during absence of the latter on sick or annual leave or leave without pay. The compensation is to be at the rate provided by law for postmasters.

Labor-Management Disputes in August 1947

THE MONTH OF AUGUST was relatively free from major work stoppages. The largest was the shipyard dispute, which began in late June, expanded in early July until a total of about 75,000 workers were involved, and continued throughout August. A few settlements with individual companies reduced the number of workers involved in this strike to approximately 50,000 by the end of the month. During the early part of the month the auto industry experienced scattered disruptions due to parts shortages resulting from the Murray Corp. strike and to refusal of small groups of employees to work under conditions of extremely hot weather. Several disputes centered around questions of new contracts to be signed before August 22 when the new Labor-Management Relations Act of 1947 became effective and changed procedural requirements for establishing certain types of union security in labor-management contracts.

Murray Corp. Strike Settled

A 28-day strike involving over 6,000 employees of the Murray Corporation of America (see p. 275) was settled August 19 by an agreement between the company and the local UAW-CIO. This dispute, which because of parts shortages had idled upwards of 50,000 auto production workers of other companies, centered particularly around the question of union financial immunity from damage suits for unauthorized strikes under the new Labor-Management Relations Act of 1947. The agreement provided that neither the union nor its officers or members should be liable for damages for unauthorized stoppages. In return the local union agreed that no strike or picketing would be authorized until sanction was given by the international union and until 45 days after the filing of a grievance. In the event of an unauthorized strike the company has the right to discharge or otherwise discipline the participants. The union may review such disciplinary action and process any complaints relating thereto through the grievance procedure of the contract.

The agreement, which runs to January 31, 1949, also provided for a wage increase of 15 cents an hour, retroactive to May 1.

Ford Strike Averted

Partial agreement August 5 on terms of a new contract between the Ford Motor Company and the National Ford Department of the UAW-CIO (see p. 275) averted a strike which threatened to involve over 100,000 workers in Ford plants throughout the country. The principal stumbling block in negotiations had been a "financial-penalty exemption clause," similar to the issue in the Murray Corp. strike. The parties agreed that the Ford company would waive all rights to sue the union for damages resulting from breach of contract pending a study of the problem by a joint committee which has up to one year to formulate a solution. Negotiations on wage and pension plan issues continued until full agreement on contract terms was reached shortly before midnight of August 21—just before the new Labor-Management Relations Act of 1947 became effective. The new 2-year contract retains the union shop and provides that the workers shall

decide by vote whether to accept a small wage increase with a pension plan or a larger wage increase with no pension plan.

New Contract for East-Coast Longshoremen

A new contract between the International Longshoremen's Association AFL and the New York Shipping Association was reached August 21. Although the old contract would not have expired until September 30, the union sought and obtained the new contract, retaining its preferential hiring clause, before the new Labor-Management Relations Act of 1947 went into effect, August 22. The union had sought a wage increase of 25 cents an hour but settled for an increase of 10 cents per hour over the old rate of \$1.65. Members of two longshoremen's locals in New York refused to go along on the settlement and struck for a period of 6 days. About 4,000 workers were reported to be involved in the stoppage which tied up a number of ships including the *America*, of the United States Lines, scheduled to sail for Europe with 950 passengers. Delayed ships were released August 26 after members of the insurgent locals voted to call the strike off.

Recent Decisions of Interest to Labor¹

Labor Relations²

Walk-out in Protest to Change of Foreman not Protected: In a recent decision of a circuit court of appeals³ it was held that a walk-out in protest to the removal of a foreman is not a "legitimate concerted activity," and therefore the discharge of two of the leaders of the walk-out did not constitute interference in violation of section 8 (1) of the National Labor Relations Act.

In reversing the National Labor Relations Board, which had directed reinstatement of these employees, the court ruled that the discharge of the foreman was a prerogative of management, and employees who walked out in protest to this change were not engaged in the type of concerted activity which is protected by the act. The court rejected as unsupported by substantial evidence the Board's finding that the walk-out was attributable to rumors of a wage decrease; but held that even if the facts supported such a conclusion, the walk-out was unauthorized, and beyond the protection of the act, because at the time it occurred no demands had been made on the employer nor had any bargaining been conducted with reference to the rumored wage decrease.

Free Speech and Coercive Statements: The National Labor Relations Board recently ruled⁴ that the

¹ Prepared in the Office of the Solicitor, U. S. Department of Labor. The cases covered in this article represent a selection of the significant decisions believed to be of special interest. No attempt has been made to reflect all recent judicial and administrative developments in the field of labor law or to indicate the effect of particular decisions in jurisdictions in which contrary results may be reached, based upon local statutory provisions, the existence of local precedents, or a different approach by the courts to the issue presented.

² Decisions reported under this section involving the National Labor Relations Act were decided on the basis of that act prior to its amendment by Public Law 101, the Labor-Management Relations Act, 1947.

³ *National Labor Relations Board v. Reynolds International Pen Co.* (U. S. C. C. A. (7th) June 24, 1947.)

⁴ *In re Electric Steel Foundry* (74 N. L. R. B. 30, June 16, 1947).

distribution by an employer of a letter which predicted certain unfavorable consequences from a unionization of his plant was not violative of the act, as the letter did not indicate that these consequences would flow from reprisal on the part of the employer to the unionization.

The letter in question, distributed the day before the election, stated that if the employees joined the union "production will be handicapped by senseless restrictions, . . . cooperation will be replaced by dispute, . . . [and] we would not be able to maintain the past standard of employment." The Board construed these statements as mere predictions of what would result from unionization, without any indication that these results would be obtained by use of the employer's economic power. As such the Board ruled that there had been no unlawful interference.

Employer's Limiting of Bargaining Committee Unlawful: "It is contrary to the policy of the act, for an employer, either by unilateral act or by contract with the exclusive representative of his employees, to limit the class or group from among whom the employees may thereafter be represented for the purposes of collective bargaining." Such was the holding in a case⁵ recently decided by the National Labor Relations Board.

The employer in this case refused to bargain with the union so long as the bargaining delegation included an individual who was not a member of the local, although he was a representative of the international union. The employer relied upon an agreement with the union which he construed as permitting outside representatives to participate in the disposition of grievances, but otherwise prohibiting their participation in the bargaining process. The Board ruled that such an agreement was invalid and could not be relied upon as justification for refusal to bargain with a committee which included an outside representative, since it deprived the employees of their right under the act to choose their representatives freely.

The Board pointed out, however, that this decision leaves intact the principle enunciated in earlier cases⁶ to the effect that such matters as the size and general composition of a shop committee selected to handle local grievances or to accompany local or international representatives

⁵ *In re Oliver Corp.* (74 N. L. R. B. 88, July 11, 1947).

⁶ As, for example, *In re Clayton and Lambert Mfg. Co.* (34 N. L. R. B. 502).

in collective-bargaining negotiations are proper subjects for collective bargaining and agreements between employers and their representatives.

Controversy Between District of Union and Locals Is a "Labor Dispute": A Federal district court ruled⁷ that a controversy between a district of a labor union on the one hand and a local and its former officers on the other is a "labor dispute" within the meaning of the Norris-LaGuardia Act. The administrator for a district of a union sought to enjoin several former officers of the local from expending funds of the union, collecting check-offs, and holding themselves out as officers of the locals. The court refused to issue the injunction. It stated that the facts presented a "labor dispute" within the meaning of section 13 of the Norris-LaGuardia Act, in that the controversy was between "one or more employees or associations of employees and one or more employees or associations of employees," and that it involved "the representation of persons in negotiating, fixing, maintaining, changing, or seeking to arrange terms or conditions of employment."

Wages and Hours ⁸

Bonuses Which Are Not Included in Determining Regular Rate: In two recent decisions the courts rejected the contention that certain bonus payments made to employees by their employers should be included in computing the regular rate upon the basis of which the time and one-half overtime compensation is determined.

The first case⁹ involved so-called "prosperity bonus" payments, which had been made at irregular times from a lump sum appropriated for such purpose, after each profitable quarter, by the company's board of directors. The amount to be paid to each individual was determined after the lump sum to be used for the particular known payments had been appropriated. It was a fixed amount contingent upon the total that had been appropriated and the wage bracket of the employee. Employees were not informed or

promised in advance that these bonuses would be paid. Upon such facts the court ruled that the bonus payments did not have to be included in calculating the regular rate of compensation. The court contrasted this case with those in which the bonus is a matter of contractual arrangement or the board of directors authorizes regular future payments instead of directing each payment after the labor has been performed as was done in this case.

In the second case,¹⁰ the Circuit Court of Appeals for the Eighth Circuit upheld a finding of a district court that the bonus in question had been granted after the work had been completed, and was not issued pursuant to any prior agreement with the employees. The court concluded that such a bonus is in the nature of a gift or a sharing of profits earned, as distinguished from an incentive payment, and need not be included in determining the regular rate.

Service Establishment Exemption: In a suit for overtime compensation under section 7 of the Fair Labor Standards Act,¹¹ an employer, who was in the business of cleaning and renovating furniture, rugs, etc., claimed that his employees were exempt from the act under its section 13 (a) (2), which exempts "any employee engaged in any retail or service establishment the greater part of whose selling or servicing is in intrastate commerce . . ." In rejecting this contention the court relied upon the United States Supreme Court's statement that "the exemption reaches employees of only such retail or service establishments as are comparable to the local merchant, corner grocer or filling-station operator who sells to or serves ultimate consumers . . ."¹² The court found that in this case the employer's business was "not designed to attract the attention of the consuming public in the manner usually associated with retail establishments." It found that a substantial portion of the employer's business was devoted to providing services to interior decorators, which was essentially a wholesale rather than a retail operation.

Effect of Portal-to-Portal Act on Liquidated Damages: Another issue in the same case¹¹ was the effect of the recently enacted Portal-to-Portal Act

⁷ *Wilson v. Dias* (U. S. D. C., E. D., Pa. June 13, 1947).

⁸ This section is intended merely as a digest of some recent decisions involving the Fair Labor Standards Act and the Portal-to-Portal Act. It is not to be construed and may not be relied upon as an interpretation of these acts by the Administrator of the Wage and Hour Division or any agency of the Department of Labor.

⁹ *McComb v. Shepard-Niles Crane & Hoist Corp.* (U. S. D. C., W. D., N. Y., June 19, 1947).

¹⁰ *Walling v. Adam Electric Co.* (U. S. C. C. A. (8th) July 14, 1947).

¹¹ *Lesser v. Sertner's, Inc.* (U. S. D. C. S. D. N. Y., June 10, 1947).

¹² *Roland Co. v. Walling* (326 U. S. 657 at p. 666).

on the right of an employee under section 16 (b) of the Fair Labor Standards Act to recover not only the amount of the unpaid overtime compensation, but also an equal amount as liquidated damages. The Portal-to-Portal Act amends this provision by stating that the court in its discretion may award no liquidated damages or only a portion of such damages, if the employer shows that his violation had been committed in good faith and that he had reasonable grounds to believe that his conduct was not in violation of the act. The court in this case, however, ruled that the evidence disclosed a lack of good faith and a deliberate violation of the act. As such it held that an allowance of 100 percent liquidated damages was proper.

Volunteer Worker Not Covered: The Circuit Court of Appeals for the Second Circuit has reversed ¹³ a district court ruling ¹⁴ that a person who had volunteered to work for an employer without any arrangements for compensation, and had stated on several occasions that he would not accept wages, was nonetheless covered by the act; the lower court had ruled that the situation fulfilled the requirements of the act's broad definition of "employ" i. e., "suffer or permit to work." The circuit court pointed out that the reversal was required by the United States Supreme Court decisions in the recent cases in which it was held that persons engaged in a course of training on railroads solely for their own benefit are not employees of the railroads within the meaning of the Fair Labor Standards Act.¹⁵

Veterans Reemployment

Seniority Agreement Discriminating Against Veterans Invalid: During an employee's absence in military service, his employer entered into an agreement with the union, which purported to clarify seniority rules and to give added significance to continuous service in policies governing promotions. The agreement provided that in case a person of highest seniority were unable to fill a vacancy "because of illness or other causes" the person next in line would temporarily be assigned to the job, but the employee temporarily unable to

accept the position would be credited with the time spent in the job by the employee temporarily assigned. However, it was further provided that this should not apply to persons unable to accept the promotion because of induction into the military forces. While the veteran was in the service, the company promoted several persons who had less seniority to positions for which he would have qualified had he not been absent. He was reemployed upon his discharge from the service in the position he held at the time he was inducted.

The court ruled ¹⁶ that the agreement, by excluding employees in the service from the benefits of the new seniority provision, discriminated against veterans, and therefore could not operate to prevent the veteran from being reemployed at the higher position to which he would have been entitled had the contract not contained the exclusion. The court pointed out that a veteran is entitled to the benefits of any contracts which were made in his absence, but that any parts of such contracts that discriminate against veterans are void.

Permanent and Temporary Positions: Two recent district court cases involved the meaning of a phrase in the Selective Training and Service Act which declares that a veteran is entitled to reinstatement if the position he left was "other than temporary."

A veteran had been employed as a "helper." There arose a shortage of skilled mechanics, and the company entered into an agreement with the union to the effect that helpers could be temporarily advanced to service as "mechanics." Such persons would acquire no seniority as mechanics unless and until they had accumulated 3 or more years of continuous service as mechanics, and could be reduced to helpers at any time during this period if mechanics became available. The veteran had been promoted to mechanic pursuant to this agreement, and was inducted into the service while holding this position. Upon his return he was reemployed as a mechanic, but he was subsequently reduced to a helper during a reduction in force.

The court held ¹⁷ that this reduction was not a violation of the Selective Training and Service Act. It stated that the act does not guarantee

¹³ *Rogers v. Schenkel* (U. S. C. C. A. (2d) June 21, 1947).

¹⁴ See *Monthly Labor Review*, January 1947 (p. 84).

¹⁵ See *Monthly Labor Review*, May 1947 (p. 859).

¹⁶ *Armstrong v. Tennessee Coal Co.* (U. S. D. C. N. D. Ala., July 9, 1947).

¹⁷ *Spearman v. Thompson* (U. S. D. C. E. D. Ark., May 1, 1947).

reemployment in other than a temporary "employment," but rather in other than a temporary "position." It concluded that the position of mechanic held by the veteran at the time of his induction was temporary; and that he could not acquire other than temporary status in that position until he had completed the 3 years of actual experience required in the collective-bargaining agreement by which he was bound.

The veteran in the second case,¹⁸ which did not involve a union agreement, had been inducted from a position which was entitled "sheet metal worker temporary." His prior job had been as a sheet metal worker helper. The court ruled that the "temporary" designation did not operate to deprive the veteran of his right to be reinstated as a sheet metal worker helper, which was his permanent position when he entered the service. In reaching this conclusion the court pointed out that the word "position" means employment and not the particular job the veteran had been performing. As such the court concluded that the veteran, while he had been working in a temporary job of sheet metal worker, had permanent employment status as a sheet metal worker helper, and was entitled to reinstatement in that position.

Decisions of State Courts

Massachusetts: Strikes and Picketing to Obtain Maintenance of Membership Unlawful: The highest court in Massachusetts has held¹⁹ that strikes and picketing to obtain maintenance of membership contracts are unlawful, are not protected by the free speech provision of the Constitution, and may be enjoined.

In reaching its conclusion the court relied on the numerous Massachusetts decisions which have declared that a strike for a closed shop is a strike for an illegal purpose. After reviewing various discussions of the maintenance of membership contract, the court concluded that the principle of the closed-shop cases is fully applicable to this situation. Holding, further, that the principle of such

Supreme Court decisions as *Thornhill v. Alabama*,²⁰ which have held picketing to be protected by the free speech provision of the Constitution, is not applicable, the court stated: "We do not understand, however, that that court has held that picketing in support of an unlawful objective cannot be enjoined. . . . Until there is an unequivocal pronouncement to that effect we adhere to the view of the law laid down in our own decisions."

Nebraska: Anti-Closed Shop Amendment Constitutional: A Nebraska district court has upheld²¹ the constitutionality of the Nebraska anti-closed-shop amendment. The decision stated that (1) the amendment makes unlawful and void any closed shop or maintenance of membership agreement, insofar as applicable to employment in Nebraska, whether such agreement was executed before or after the effective date of the amendment, December 12, 1946; (2) the particular phase of employer-employee relations covered by this amendment has a definite relation to the public welfare, and is subject to the police power of the State; and (3) the amendment does not conflict with the Federal Constitution or any Federal law, including the Labor Management Relations Act, 1947.

Ohio: Stranger Picketing Upheld: The Supreme Court of Ohio in 1940 decided²² that a "labor dispute" does not exist in a case in which the members of a picketing union are neither employees nor former employees of the picketed employer. A lower court in that State, however, recently ruled²³ that subsequent decisions by the United States Supreme Court declaring picketing protected by the free speech provisions of the Constitution overrule the earlier case. As such it refused to issue an injunction completely prohibiting such picketing, although it did issue an injunction limiting the number of pickets and prohibiting violence.

¹⁸ 310 U. S. 88.

¹⁹ *Lincoln Union v. Northwestern I and M Co.* (Neb. Dist. Ct., Lancaster County, July 7, 1947).

²⁰ *Crosby v. Rath* (136 O. S. 352).

²¹ *Jones v. International Association of Machinists* (Ohio Ct. of Comm. Pl., Cuyahoga County, June 16, 1947).

¹⁹ *David v. Boston & Maine R. R.* (U. S. D. C. D. N. H., May 29, 1947).

²⁰ *Colonial Press v. Ellis* (Mass. Sup. Jud. Ct., June 26, 1947).

Publications of Labor Interest

The Keynesian revolution. By Lawrence R. Klein.
New York, Macmillan Co., 1947. 218 pp., charts.
\$3.50.

Addressed by Dr. Klein of the Cowles Commission to a mixed group of readers, this book contains exposition, at various levels of economic understanding, by means of text, graphs, and mathematical appendixes. It is definitely not a Keynes for the layman, as the author properly insists; and, like the General Theory itself, it is sometimes more successful in putting across essential ideas by means of digressions than by systematic exposition. With considerable clarity, the author delineates the essential differences between Keynesian and traditional theory and sets aside for separate discussion issues that he believes to be side controversies.

Because Keynes, except for his predilections on policy, typified the main current in economic thought through the 1920's, the revolution in his thinking which Klein traces may deserve to be called a revolution in the field of economic theory. There are illuminating passages on obscure and some not so obscure writers who anticipated blocks in the Keynesian structure, but the reader may prefer a fuller account of the development of economic theory, as in Heimann's *History of Economic Doctrines* (1945). In his *Treatise on Money*, which is intelligibly summarized by Klein and restated mathematically in an appendix, Keynes was attempting to formalize a theory of the determination of prices to justify the generally prevailing belief in the possibility of controlling the business cycle through monetary and banking policy. This accounted for the high expectations at time of publication and the subsequent disappointment, particularly in view of what transpired in 1929, when Keynes succeeded in this to no one's satisfaction, not even his own.

The key to the revolution, in Klein's view, was Kahn's development in 1931 of the multiplier relating consumption (and therefore savings) to income and not to the interest rate. Traditionally the strategic factors of savings and investment were related to the determination of interest, with the interest rate bringing the two into balance. The linking of savings and investment to determine income and output, rather than interest, is what Klein refers to as the Keynesian revolution. The necessary step in Keynes'

thinking was abandonment of the view that the interest rate is an important determinant of savings or investment. In the *General Theory of Employment, Interest, and Money*, he attempted to show through a theory of effective demand that savings and investment, as schedules, are brought into equality at various levels of employment and not necessarily full employment. He believed that his real contribution was to change the equilibrating variable from the interest rate to the level of income.

The consequence for economic thought was the destruction of the belief in the tendency toward self-adjustment of the economic mechanism toward a full-employment equilibrium and the orthodox explanation of unemployment solely in terms of imperfections in competition, rigid money wages, or lower limits to the interest rate. For economic policy, it meant a loss of confidence in banking-system control of the business cycle, and emphasis on measures to raise simultaneously the level of consumption and investment expenditures under conditions of under-employment.

Le mouvement ouvrier Canadien. By Jean-Pierre Després.
Montreal, Fides, 1947. 205 pp., bibliography.
\$1.50.

This volume, published under the auspices of Laval University's Industrial Relations Department, traces the growth of organized labor in Canada. From its beginning, the author states, the Canadian labor movement was strongly influenced by and in many ways paralleled important developments in the labor movement of the United States. (In 1944, 2,556 Canadian locals out of 4,123 were affiliated with international unions having headquarters in the United States.)

Most unions in Canada are affiliated with three principal national federations: Trades and Labor Congress of Canada (TLCC), which strongly resembles the American Federation of Labor in the United States; the Canadian Congress of Labour (CCL), which is similar to the Congress of Industrial Organizations in the United States; and the Canadian and Catholic Confederation of Labor (*Confédération des Travailleurs Catholiques du Canada—CTCC*), which has no counterpart in the United States. In addition, there are independent railway brotherhoods which are, for the most part, linked to the railroad unions in the United States.

Canadian locals doubled membership during World War I; and, unlike unions in the United States, maintained their increased membership during the 1920's and early 1930's. The impetus given unionization in the United States in the middle thirties was reflected in Canada, and during World War II the membership of Canadian unions again doubled, reaching 724,188 in 1944. Approximately 25 percent of the nonagricultural workers were organized. Transport and communications workers were most thoroughly unionized, with 59 percent of all workers in that industrial classification belonging to unions. Mining was 53 percent organized, construction 46 percent, and manufacturing approximately 30 percent. The total membership in 1945, the latest date for which official figures have been published, was 711,117, distributed among the organizations as follows: Trades and Labor Congress

EDITOR'S NOTE.—Correspondence regarding the publications to which reference is made in this list should be addressed to the respective publishing agencies mentioned. Where data on prices were readily available, they have been shown with the title entries.

of Canada, 312,391; Canadian Congress of Labor, 244,750; Canadian and Catholic Confederation of Labor, 68,205; other unions, 85,771.

The Canadian Congress of Labor is affiliated with the World Federation of Trade Unions. Following the policy of the AFL in the United States, the Trades and Labor Congress of Canada has abstained from participation in the WFTU. In September 1946, the Canadian and Catholic Confederation of Labor joined the International Confederation of Christian Unions.

Since 1919, the TLCC has represented Canadian labor at meetings of the International Labor Organization; the two other national labor federations have been represented by technical advisers to the Canadian labor delegate. The Canadian unions have actively supported moves to amend the British North American Act so that Canada may ratify the conventions of the ILO.

In contrast with the TLCC and the CCL, the Catholic Confederation, having a membership concentrated in the Province of Quebec, opposes a greater centralization of government in Canada. In addition, it opposes union political activities such as those of political action committees of the two larger federations. It emphasizes its purely Canadian traditions, and its constitution expresses opposition to "domination" of Canadian unions by unions in the United States.

Cooperative Movement

Summary of cases relating to farmers' cooperative associations. By Lyman S. Hulbert. Washington, U. S. Department of Agriculture, Farm Credit Administration, Cooperative Research and Service Division, 1947. 15 pp.; processed. (Summary No. 34.)

Cites court decisions in several cases arising under workmen's compensation, social security, Federal Fair Labor Standards, and other acts.

Frozen food locker cooperatives in Illinois, 1946. By Paul C. Wilkins and L. B. Mann. Washington, U. S. Department of Agriculture, Farm Credit Administration, Cooperative Research and Service Division, in cooperation with St. Louis Bank for Cooperatives, 1947. 37 pp., charts; processed. (Miscellaneous report No. 109.)

Covers 32 associations operating 71 plants in 1945-46; shows a 30-percent increase in assets, an 11-percent increase in income, and a 30-percent increase in net earnings over 1944-45.

Cooperation in Canada, 1945—fourteenth annual summary. Ottawa, Department of Agriculture, Economics Division, Marketing Service, 1946. 8 pp.; processed.

Includes statistics of cooperative associations doing purchasing or marketing for their members, and of farmers' mutual fire insurance companies. Fishermen's associations and service cooperatives are not included.

The maritime cooperative movement today. By Alexander Laidlaw. (In Public Affairs, Halifax, Canada, June 1947, pp. 143-146. 30 cents.)

Affords a general picture of cooperative development as regards farmers', fishermen's, and consumers' cooperatives, and credit unions, in the Maritime Provinces of Canada.

United cooperative movement in Czechoslovakia. Prague, Central Cooperative Council, 1946. 16 pp.

Gives summary statistics of cooperatives for different years, 1937 to 1946, and describes the position of the cooperative movement during German occupation of the country and since its liberation.

Cost and Standards of Living

Farm operator family level of living indexes for counties of the United States, 1940 and 1945. Washington, U. S. Department of Agriculture, Bureau of Agricultural Economics, 1947. 42 pp., map, charts; processed.

This survey indicates that the increase in farm income between 1940 and 1945 resulted in a 25-percent improvement in the living conditions of farm operators. Criteria of "level of living" used in the survey were the average value of farm products sold or traded, and the percentage of farms with electricity, telephones, and automobiles.

Housing and fuel expenditures of city families. Washington, U. S. Bureau of Labor Statistics, 1947. 13 pp. (Serial No. R. 1889; reprinted from Monthly Labor Review, May 1947, with additional data.) Free.

Indexes of the retail cost of housefurnishings to moderate-income families since 1935. Washington, U. S. Bureau of Labor Statistics, 1947. Various pages; processed. Free.

Living and office-operating costs in Peru. By Laurin B. Askew. *Living and office-operating costs in Argentina.* By Theodore J. Pursley. Washington, U. S. Department of Commerce, Office of International Trade, 1946 and 1947. 8 and 9 pp., respectively. (International Reference Service, Vol. 3, No. 53; Vol. 4, No. 2.) 5 cents each.

The data in the pamphlets listed are intended primarily for United States citizens who plan to travel, reside, or maintain an office in either country.

Education and Training

Digest of annual reports of State boards for vocational education to the U. S. Office of Education, Vocational Division, fiscal year ended June 30, 1946. Washington, Federal Security Agency, Office of Education, 1947. 58 pp., charts; processed.

Industrial apprenticeship. By Paul Bergevin. New York, McGraw-Hill Book Co., Inc., 1947. 280 pp., bibliography. \$2.75.

Based on personal experience in the field of apprenticeship education, and on study of successful training courses, the author lists and discusses basic principles for a successful apprenticeship system.

Union's one-year training program equips veterans for careers in garment industry. (In Industrial Bulletin, New York State Department of Labor, New York, March 1947, pp. 37-39, illus.)

Description of an on-the-job training program in the New York City women's garment industry, sponsored by local 10 of the International Ladies' Garment Workers' Union to aid veterans in getting reestablished.

Programme d'enseignement pour la formation technique des délégués ouvriers dans les comités d'entreprises—cours du degré: Première leçon. By Jean Guéhenno. Paris, Confédération Générale du Travail, Comité National Permanent d'Éducation Ouvrière, [1946?]. 14 pp.

Introductory explanation to a series of lessons for training worker representatives in the labor-management committees which were established in French industrial, commercial, and other enterprises by legislation of 1945 and 1946. Stresses the need for learning how to discuss problems, take notes, and bear responsibilities.

Report of the departmental committee on apprenticeship for coal face workers. London, Ministry of Fuel and Power, 1947. 18 pp. 4d. net, H. M. Stationery Office, London.

Guaranteed Wages

Economic analysis of guaranteed wages. Washington, U. S. Bureau of Labor Statistics, 1947. 62 pp. (Bull. No. 907.) 25 cents, Superintendent of Documents, Washington.

Economic analysis of the potential effects of guaranteed wage plans on the national economy, and the relation of guaranteed wages, if widely adopted, to economic security, business cycles, and the pattern of resource uses. Professors Alvin H. Hansen and Paul A. Samuelson of Harvard University were commissioned by the Bureau of Labor Statistics to make this analysis as part of its collaboration on the guaranteed wage study of the Advisory Board of the U. S. Office of War Mobilization and Reconversion, and to supplement the Bureau's description of guaranteed wage plans (see following note). The present report was first published as Appendix F to the report to the President by the Advisory Board.

Guaranteed wage or employment plans. Washington, U. S. Bureau of Labor Statistics, 1947. 17 pp. (Bull. No. 906.) 15 cents, Superintendent of Documents, Washington.

Summary of major findings of the Bureau of Labor Statistics' survey, begun in 1944, of guaranteed wage or employment plans, first published as Appendix C to the report on guaranteed wages made to the President by the Advisory Board of the U. S. Office of War Mobilization and Reconversion.

Handicapped Workers

A guide for the placement of the physically impaired. Washington, U. S. Civil Service Commission, 1947. 337 pp., forms. (Pamphlet No. 14.) 4th ed. 60 cents, Superintendent of Documents, Washington.

This volume, in previous editions entitled "Operations manual for the placement of the physically handicapped," lists some 6,100 positions in the Federal civil service which may be held by the physically impaired. These are shown by individual Federal establishment and civil service region; minimum physical requirements are indicated for the respective positions as to orthopedic defects, impaired vision, impaired hearing, and chest disabilities.

How to use handicapped workers. By Arthur T. Jacobs. Deep River, Conn., National Foremen's Institute, Inc., 1946. 186 pp., forms. \$3.50.

Popularly written manual based largely on the analytical techniques developed by the U. S. Employment Service for selective placement of workers, through which job requirements are matched with physical capacities.

A message to the medical profession on vocational rehabilitation of the disabled: A State-Federal partnership program. Washington, Federal Security Agency, Office of Vocational Rehabilitations, 1947. 14 pp., charts.

Description of the program for supplying medical services to disabled civilians, under the Vocational Rehabilitation Act Amendment of 1943.

Operation of an urban sheltered workshop for the tuberculous. By Robert L. McNamara and Agnes W. Brewster. (In Public Health Reports, Federal Security Agency, Public Health Service, Washington, July 4, 1947, pp. 971-991. 10 cents, Superintendent of Documents, Washington.)

Account of a program which provides a medically supervised period of work for discharged tuberculous patients, under a graduated daily schedule. Statistics for a group of 850 workers, for the period from 1930 to 1945, cover previous occupational experience and earnings at the workshop as well as the cost of the program.

Housing and Building Construction

Building construction in principal cities of the United States, 1921-46, based on building permits issued. Washington, U. S. Bureau of Labor Statistics, 1947. 25 pp.; processed. Free.

Covers both residential and nonresidential construction.

Construction cost analysis: Large scale low rent housing—public, private, and limited dividend, Volume I. New York, New York City Housing Authority, 1946. 32 pp., map, plans, illus.

Detailed cost analyses are given for the three types of housing covered in the volume. Specifications for the buildings themselves are given in Volume II of the report (published separately and priced at \$2.50).

Income

National income and product statistics of the United States, 1929-46. Washington, U. S. Department of Commerce, Office of Business Economics, National Income Division, 1947. 54 pp., charts. (Supplement to Survey of Current Business, July 1947.) 25 cents, Superintendent of Documents, Washington.

Revised estimates, with explanations, of national income and national product and their component series, parts of which have appeared in preliminary form in the Survey of Current Business. Some of the data are given in this issue of the Monthly Labor Review (p. 325).

National income estimates of Soviet Russia—their distinguishing characteristics and problems. By Paul Studenski and Julius Wyler. (In Papers and proceedings of 59th annual meeting of American Eco-

conomic Association, American Economic Review, Evanston, Ill., May 1947, pp. 595-610.)

Discusses Russian methodology in computing the national income, and arrives at the conclusion that Soviet estimates of national income in their present form "are of no use for purposes of international comparison."

Industrial Accidents and Accident Prevention

Annual report on industrial accidents in Illinois for 1945, Part II: Summary of compensation cases closed during 1945. Chicago, Illinois Department of Labor, Division of Statistics and Research, 1947. 82 pp.; processed.

Safe practices around electrical equipment. Washington, U. S. Department of Labor, Division of Labor Standards, 1947. (Industrial safety charts, series V.) 5 cents, Superintendent of Documents, Washington.

Safety manual for operation of copolymer laboratories. Washington, Reconstruction Finance Corporation, Office of Rubber Reserve, 1947. 54 pp., diagrams. 25 cents, Superintendent of Documents, Washington.

How industry protects the worker's eyes. By John M. Roche and Hedwig S. Kuhn, M.D. (In National Safety News, Chicago, July 1947, pp. 33-39, forms, illus. 60 cents.)

Report of a survey made by the National Safety Council among 730 plants. Covers eye-injury frequency rates in these establishments during 1945, practices as to furnishing goggles and other face protection to workers, and enforcement of rules on use of goggles. Includes a list of recommended practices.

La prévention des accidents du travail. By F. Mercx. (In Revue du Travail, Ministère du Travail et de la Prévoyance Sociale, Brussels, March-April 1947, pp. 244-264.)

A plan for the prevention of work accidents, covering practical protection methods and emphasizing psychological and human factors.

Industrial Hygiene

Industrial hygiene for all workers—evaluation of present facilities. By J. G. Townsend. (In Industrial Medicine, Chicago, June 1947, pp. 281-284. 75 cents.)

Notes particularly the recent expansion and activities of State and local public industrial hygiene units with the aid of Federal grants-in-aid, earmarked for industrial hygiene for the first time in the fiscal year 1947. (For recent State legislation on industrial hygiene, see p. 283 of this issue of the Monthly Labor Review.)

New York University inaugurates institute of industrial medicine. (In Industrial Medicine, Chicago, July 1947, pp. 360-367. 75 cents.)

Outlines purposes of the Institute of Industrial and Social Medicine, established as a unit of the New York University-Bellevue Medical Center on June 3, 1947. A 9-point program, to include not only the training of industrial physicians but also important services and research in the field of industrial hygiene, will be offered.

Carbon tetrachloride. Washington, U. S. Department of Labor, Division of Labor Standards, 1947. 20 pp., bibliography. (Controlling chemical hazards series, No. 9.) 10 cents, Superintendent of Documents, Washington.

Pompholyx and occupational (contact) dermatitis. By Tibor Benek, M.D. (In Industrial Medicine, Chicago, July 1947, pp. 344-349, bibliography, illus. 75 cents.)

Gives data on 378 cases of pompholyx, most of them work connected, including information on occupations of workers and on location and duration of infection. This type of dermatosis is differentiated from other kinds, and therapeutic measures and compensability are discussed.

Industrial Relations

Department store unionization trends. By Abraham A. Desser. (In Conference Board Management Record, New York, June 1947, pp. 141-146.)

Analysis of 20 union agreements, giving details of employee coverage, wages and hours, grievance procedures, seniority, and other provisions. Ten of the agreements are with AFL unions and ten with CIO unions.

Do we need labor courts? By George Cahill. (In Marquette Law Review, Milwaukee, May 1947, pp. 1-27. 75 cents.)

The writer cites the precedents for government wage regulation in early English law and the objectives and accomplishments of the Australian Court of Conciliation, and examines recent trends in the United States in their relation to the general problem of maintaining industrial peace.

Labor standards provisions in Government foreign procurement contracts. By Robert E. Mathews. (In Illinois Law Review, Chicago, May-June 1947, pp. 141-168.)

Case-study of the development of the governmental administrative program dealing with labor standards provisions in Government contracts.

Sociological theory in industrial relations. By Herbert Blumer. (In American Sociological Review, Evanston, Ill., June 1947, pp. 271-278. \$1.)

Extent of collective agreements in seven European countries. Washington, U. S. Bureau of Labor Statistics, 1947. 10 pp. (Serial No. R. 1893; reprinted from Monthly Labor Review, June 1947.) Free.

Conciliation machinery. By O. H. Parsons. (In Industrial Law Review, London, March 1947, pp. 318-322. 2s.)

This article deals with conciliation in the coal industry, and is the first of a series which will describe conciliation machinery and procedures in major British industries. The building industry is covered in the April issue of the Industrial Law Review.

Industrial relations in Hungary. (In International Labor Review, Geneva, March-April 1947, pp. 247-260. 50 cents. Distributed in United States by Washington Branch of I. L. O.)

Analysis of the effect upon industrial relations in Hungary, since its liberation, of labor legislation, agrarian reform, and the nationalization of certain key industries

Industry Reports

The miners' case and the public interest—a documentary chronology. By Edward A. Wieck. New York, Russell Sage Foundation, 1947. 92 pp. 50 cents.

Point-by-point chronology of events following Government seizure in 1946 of the bituminous-coal mines, and the action of the U. S. Supreme Court in 1947 in upholding the conviction of the United Mine Workers of America and the union's president for contempt of court. Pertinent documents are reproduced.

Compensation and service of railroad employees—statistical tables, 1945. Chicago, U. S. Railroad Retirement Board, 1947. 196 pp.; processed.

The data in these tables are based on the records of service and compensation credits earned in 1945 by employees of companies covered by both the Railroad Retirement and Railroad Unemployment Insurance Acts. They include classifications according to class of employer, occupation and occupational group, amount of credited compensation, and number of months of service.

Seasonal workers in California: A study of four seasonal industries to provide basic data relating to the problem of eligibility for unemployment insurance. Sacramento, Department of Employment, 1947. Various pages, charts; processed.

The four industries studied were fruit and vegetable canning, fish canning, dried fruit packing, and pine logging and sawmills. The general characteristics of seasonal employment are described. The report is primarily an analysis of interviews with employers and about 1,900 workers.

The cigar and cigarette industry in Puerto Rico. Washington, U. S. Department of Labor, Wage and Hour and Public Contracts Divisions, 1947. 37 pp.; processed. Free.

One of a series of reports prepared to furnish basic data needed by industry committees considering upward revision of the minimum-wage rate. Gives information on previous minimum-wage action under the Federal Fair Labor Standards Act, on average hourly earnings, and on economic and competitive conditions in the industry. Similar reports have been published for the following Puerto Rican industries: Artificial flower; foundry, machine shop, and fabricated metal products; full-fashioned hosiery; hooked rug; small leather goods and related products; pearl button; railroad, railway express, and property motor transport; shoe manufacturing; sugar manufacturing; vegetable, fruit, and fruit-juice canning; vegetable packing; wholesaling, warehousing, and other distribution industries.

Report of the commissioner appointed to inquire into and report upon the [Australian] coal-mining industry. Canberra, Commonwealth Government Printer, [1946?]. 2 vols.; 505 pp., map, diagrams. £1 5s.

Volume I includes sections on postwar employment, absenteeism, work stoppages, working conditions, housing, and pension schemes in the industry. The most recent statistics are for 1945. Volume II contains chapters on mining conditions in individual States, the general alphabetical index, and miscellaneous material.

Labor Legislation

Explaining the Taft-Hartley Act. Washington, American Federation of Labor, 1947. 8 pp.

No. 1 in a series of four bulletins in which the AFL deals with major provisions of the new Federal Labor-Management Relations Act. No. 2 covers boycotts and strikes, No. 3 covers unfair practices, and No. 4 consists of suggested clauses for collective-bargaining contracts.

How the Taft-Hartley bill will affect your employer-employee relations—an operating guide for all employers. Deep River, Conn., National Foremen's Institute, 1947. Folded chart. Single copies \$1.

More important provisions of the Labor-Management Relations Act, 1947. By Burton A. Zorn and Howard Lichtenstein. New York, Chamber of Commerce of the State of New York, 1947. 26 pp.

New labor law—Labor Management Relations Act, 1947, with explanation. Chicago, etc., Commerce Clearing House, Inc., 1947. 128 pp. \$1.

Medical Care and Health Insurance

Union health and welfare funds—a symposium on evolution and problems, operation and experience. New York, National Industrial Conference Board, Inc., 1947. 48 pp. (Studies in business economics, No. 8.)

Maternity benefits under union-contract health insurance plans. Washington, U. S. Department of Labor, Women's Bureau, 1947. 16 pp. (Bull. No. 214.) 10 cents, Superintendent of Documents, Washington.

Digest of provisions for the financing and administration of State disability compensation systems in the laws of Rhode Island and California, and the reports of New Hampshire, Massachusetts, New Jersey, and Washington. Compiled by David Kessler. Chicago, U. S. Railroad Retirement Board, Library, 1947. 14 pp.; processed.

Statistical abstract, cash sickness compensation, [Rhode Island], benefit year 1944-45. Providence, Rhode Island Unemployment Compensation Board, 1947. 95 pp.; processed.

Detailed tables give a variety of information, including statistics on diseases and injuries. During the second year of the State program, covered by the report, 37,673 cases (including 5,038 pregnancy cases) were handled, and some 5 million dollars were paid in cash sickness benefits.

Red miracle: The story of Soviet medicine. By Edward Podolsky, M.D. New York, Beechhurst Press, Inc., 1947. 274 pp. \$3.50.

Includes chapters on accident-prevention services, public health, and socialized medicine.

Prices

Retail prices of food, 1944 and 1945. Washington, U. S. Bureau of Labor Statistics, 1947. 36 pp., charts. (Bull. No. 899.) 10 cents, Superintendent of Documents, Washington.

Typical electric bills, cities of 50,000 population and more: Typical net monthly bills as of January 1, 1947, for residential, commercial, and industrial services. Washington, Federal Power Commission, 1947. xvi, 34 pp., charts; processed. (R-33.) 25 cents.

Economic Adviser's weekly index numbers of wholesale prices in India. Delhi, Manager of Publications, 1946. 58 pp., charts. 5s. 6d.

Index numbers of 23 individual commodities, as well as general indexes of wholesale prices, 1931-45.

Soviet Union: Trends in prices, rations, and wages. Washington, U. S. Bureau of Labor Statistics, 1947. 8 pp. (Serial No. R. 1885; reprinted from Monthly Labor Review, July 1947.) Free.

Reconstruction

Report on the White Paper, "Economic survey for 1947." (In What the T. U. C. is Doing, Trades Union Congress, London, May 1947, pp. 31-39.)

States the British Trades Union Congress' position on the Government's "Economic survey for 1947" (Cmd. 7046), issued in February. Criticizes the coal target as too low and manpower estimates for the armed forces as too high. Recommends "special restraints or discouragement upon less essential industries" and "some encouragement to workpeople to move into essential industries." Objects to Government's criteria for adjudicating trade-union demands for shorter hours.

Manpower problems: Repatriation of war prisoners. (In American Perspective, Vol. I, No. 1, Foundation for Foreign Affairs, Washington, April 1947, pp. 21-34. 25 cents.)

This article, in the first number of American Perspective, reviews the situation of war prisoners, particularly their use as labor supply in various Allied countries. It is introduced as the first of a series on international manpower problems.

Soviet economic reconversion, 1945-46. By Harry Schwartz. (In Papers and proceedings of 59th annual meeting of American Economic Association, American Economic Review, Evanston, Ill., May 1947, pp. 611-623.)

Description of industrial reconversion progress in the Soviet Union, with comments on factors retarding labor efficiency. Discusses steps taken by the Government to meet the labor shortage and to promote productivity.

Social Security (General)

Compilation of the social security laws, including the Social Security Act, as amended, and related enactments through March 1, 1947. Washington, Federal Security Agency, Social Security Administration, 1947. 117 pp. 25 cents, Superintendent of Documents, Washington.

Social security: Selected list of references on unemployment, old age and survivors', and health insurance. Prepared by Matthew A. Kelly and Hazel C. Benjamin. Princeton, N. J., Princeton University, Industrial Relations Section, March 1947. 60 pp. 75 cents.

Some basic readings in social security. Washington, Federal Security Agency, Social Security Administration, 1947. 94 pp. (Publication No. 28.)

This bibliography, revised as of June 1, 1946, covers the various programs under the Federal Social Security Act; the railroad social security system; health insurance and medical care; social security planning; and material in English on foreign systems of social insurance.

La previdenza sociale alla fine del 1946—ordinamenti attuali e nuovi orientamenti in Italia ed all'estero. Rome, Ministero del Lavoro e della Previdenza Sociale, 1947. xix, 710 pp. (Studi e documenti, No. 1.)

Comprehensive study of social insurance in Italy, including statements of the purposes and fields of application of old-age, unemployment, and tuberculosis insurance; and detailed data on contributions, benefits, etc., with statistics in some cases back to 1920. Information is provided on special insurance funds, such as those for seamen, public service workers, independent workers, etc. Briefer treatment is given at the end of the volume to the social-insurance systems of Belgium, France, Germany, Great Britain, Russia, and the United States.

Wages and Hours of Labor

Wage problems of the northern cotton textile industry. New York, National Industrial Conference Board, Inc., 1947. 40 pp., charts.

A detailed study of wages, based on published data and on the results of a special survey conducted by the National Industrial Conference Board in cooperation with the Northern Cotton Textile Research Committee. The main purpose of the survey was to obtain data on the postwar wage structure of the industry in the New England States. Comparisons are made with wages in other areas and in other industries. Wage changes in the industry are viewed against the economic background of an expected increase in business hazards and decline in demand for the products of the industry.

Wage structure: Women's and misses' suits and coats, 1946. Washington, U. S. Bureau of Labor Statistics, 1947. 23 pp., charts; processed. (Wage structure, series 2, No. 45.) Free.

Other reports recently issued in this series furnish data for 1946 on wages in sawmilling in the South and in the manufacture of knitwear.

The wage rationalization program in United States Steel. By Robert Tilove. Washington, U. S. Bureau of Labor Statistics, 1947. 16 pp. (Serial No. R. 1890; reprinted from Monthly Labor Review, June 1947.) Free.

Wage levels. Princeton, N. J., Princeton University, Industrial Relations Section, July 1947. 4 pp. (Selected references, No. 16.)

References to discussions of general principles and criteria in wage determination and to studies of specific situations.

Accordo per il rinnovo della tregua salariale. (In *Notiziario della Confederazione Generale dell'Industria Italiana*, Rome, June 5, 1947, pp. 7-9.)

Text of the agreement renewing the wage truce in Italy, signed at Rome on May 30, 1947, by the General Confederation of Italian Industry and the General Confederation of Labor. Gives percentage relationships of wages of three types of skilled workers to wages of unskilled laborers (ranging from a base of 100 for a laborer to 127.50 for a highly skilled worker), as well as information on bonuses, family allowances, etc.

Women in Industry

Industrial injuries to women. Washington, U. S. Department of Labor, Women's Bureau, 1947. 17 pp. (Bull. No. 212.) 10 cents, Superintendent of Documents, Washington.

Women workers after V-J day in one community—Bridgeport, Conn. Washington, U. S. Department of Labor, Women's Bureau, 1947. 37 pp. (Bull. No. 216.) 15 cents, Superintendent of Documents, Washington.

Women who work in Utica. New York, State Department of Labor, Division of Industrial Relations, Women in Industry, and Minimum Wage, 1947. 32 pp.; processed.

Report on a study made by the Young Women's Christian Association, Utica, N. Y., of the jobs, wages, working conditions, home responsibilities, leisure-time activities, and interests of over 400 women.

General Reports

The midyear economic report of the President to the Congress, July 21, 1947. Washington, Government Printing Office, 1947. 82 pp. 25 cents.

Summarized in this issue of the *Monthly Labor Review* (p. 321).

Bureau of Labor Statistics chart series, 1946. Washington, U. S. Bureau of Labor Statistics, 1947. 114 pp. 75 cents, Superintendent of Documents, Washington.

This series of charts and the accompanying statistics present data on subjects within the scope of the Bureau of Labor Statistics, including employment and unemployment, labor turn-over, working hours, earnings, output per man-hour, industrial injuries, labor-management disputes, construction activities, and retail and wholesale prices.

Survey of consumer finances: Part I, Expenditures for durable goods and investments; Part II, Consumer incomes and liquid asset holdings. (In *Federal Reserve Bulletin*, Board of Governors of the Federal Reserve System, Washington, June 1947, pp. 647-663,

charts; July 1947, pp. 788-802, charts. Also reprinted.)

Some of the high lights of this survey are given in this issue of the *Monthly Labor Review* (p. 329).

Year book of labor statistics, 1945-46. Montreal, International Labor Office, 1947. 284 pp., bibliography. (In English, French, and Spanish.) \$2.50. Distributed in United States by Washington Branch of I. L. O.

Statistics are given for approximately 60 countries. Subjects covered include the labor force, employment, unemployment, hours of work, wages, industrial accidents, industrial disputes, prices and cost of living, migration, and production. Index numbers have been recomputed to a 1937 base.

The French Zone revisited. (In *American Perspective*, Vol. I, No. 2, Foundation for Foreign Affairs, Washington, May 1947, pp. 81-96. 25 cents.)

This review of conditions in the French Zone of occupied Germany includes some statements on economic and labor issues. It supplements a more comprehensive report published in *Information Pamphlet No. 1* of the Foundation for Foreign Affairs.

The Saar and its coal. (In *Economist*, London, July 5, 1947, pp. 22, 23. 1s.)

Report on French policy in the Saar, especially as regards production of coal. Contains a comparative table of rations for Saar miners and other groups in the French Zone of Germany.

Il mercato del lavoro. (In *Rassegna Economica della Associazione fra le Società Italiane per Azione*, Rome, June-July, 1947, pp. 161-164.)

Survey of the labor market situation in Italy. Covers data on working population; unemployment (since resumption of recording in October 1945); wage indexes of Central Institute of Statistics for different classes of workers under industrial contracts in 1946 and 1947; official cost of living and food indexes; and earnings (including family allowances, etc.) of married workers with children.

Les nouveaux articles économiques de la Constitution [Suisse].

By Arthur Steiner. (In *Revue Syndicale Suisse*, organe mensuel de l'Union Syndicale Suisse, Berne, June 1947, pp. 167-178.)

Description of movement for revision of economic articles of the Swiss constitution of 1874. Includes detail on new articles authorizing the Confederation Government to act together with the cantons and private enterprise to prevent economic crises and combat unemployment, and to legislate on protection of workers, industrial relations, compulsory extension of collective labor agreements, etc.

Current Labor Statistics

A.—Employment and Pay Rolls

- 359 Table A-1: Estimated total labor force classified by employment status, hours worked, and sex.
- 360 Table A-2: Estimated number of wage and salary workers in nonagricultural establishments, by industry division.
- 360 Table A-3: Estimated number of wage and salary workers in manufacturing industries, by major industry group.
- 361 Table A-4: Estimated number of wage and salary workers in manufacturing industries, by State.
- 362 Table A-5: Estimated number of production workers in manufacturing industries.
- 365 Table A-6: Indexes of production-worker employment in manufacturing industries.
- 367 Table A-7: Indexes of production-worker pay rolls (weekly) in manufacturing industries.
- 370 Table A-8: Estimated number of employees in selected nonmanufacturing industries.
- 371 Table A-9: Indexes of employment in selected nonmanufacturing industries.
- 371 Table A-10: Indexes of pay rolls (weekly) in selected nonmanufacturing industries.
- 372 Table A-11: Estimated number of employees on contract construction, by State.
- 373 Table A-12: Total Federal employment by branch and agency.
- 374 Table A-13: Total Federal pay rolls by branch and agency.
- 375 Table A-14: Total Government employment and pay rolls in Washington, D. C., by branch and agency.
- 376 Table A-15: Personnel and pay in military branch of Federal Government.

B.—Labor Turn-Over

- 377 Table B-1: Monthly labor turn-over rates (per 100 employees) in manufacturing industries.
- 377 Table B-2: Monthly labor turn-over rates (per 100 employees) in selected groups and industries, by class of turn-over.
- 379 Table B-3: Monthly labor turn-over rates for men and women in all manufacturing and selected groups.

C.—Earnings and Hours

- 380 Table C-1: Average earnings and hours in manufacturing and nonmanufacturing industries.
- 391 Table C-2: Estimated adjusted hourly earnings, exclusive of overtime, of production workers in manufacturing industries.
- 391 Table C-3: Average earnings and hours on private construction projects, by type of firm.

D.—Prices and Cost of Living

- 393 Table D-1: Consumers' price index for moderate-income families in large cities, by group of commodities.

D.—Prices and Cost of Living—Continued

- 394 Table D-2: Consumers' price index for moderate-income families by city, for selected periods.
- 395 Table D-3: Consumers' price index for moderate-income families, by city and group of commodities.
- 396 Table D-4: Indexes of retail prices of foods, by group, for selected periods.
- 397 Table D-5: Indexes of retail prices of foods by city.
- 398 Table D-6: Average retail prices and indexes of selected foods.
- 399 Table D-7: Indexes of wholesale prices, by group of commodities for selected periods.
- 399 Table D-8: Indexes of wholesale prices by group of commodities, by weeks.
- 400 Table D-9: Indexes of wholesale prices by group and subgroup of commodities.

E.—Work Stoppages

- 401 Table E-1: Work stoppages resulting from labor-management disputes.

F.—Building and Construction

- 401 Table F-1: Estimated construction expenditures, by type of construction.
- 402 Table F-2: Value of contracts awarded and force-account work started on federally financed construction, by type of project.
- 402 Table F-3: Estimated permit valuation of urban building construction scheduled to be started, by class of construction and by source of funds.
- 403 Table F-4: Estimated number and valuation of new dwelling units scheduled to be started in urban areas, by type of dwelling and by source of funds.
- 403 Table F-5: Estimated permit valuation of new nonresidential building scheduled to be started in urban areas, by type and by source of funds.
- 404 Table F-6: Estimated number of new dwelling units started and completed in nonfarm areas.
- 405 Table F-7: Estimated number and average construction cost of privately financed dwelling units started in 29 leading industrial areas.
- 406 Table F-8: Estimated number and construction cost of new urban and rural nonfarm dwelling units started, by source of funds.

A: Employment and Pay Rolls

TABLE A-1: Estimated Total Labor Force Classified by Employment Status, Hours Worked, and Sex

Labor force	Estimated number of persons 14 years of age and over ¹ (in thousands)												
	1947							1946					
	July ²	June ²	May	April	March	February	January	December	November	October	September	August	July
Total, both sexes													
Total labor force ³	64,035	64,007	61,760	60,650	59,960	59,630	59,510	60,320	60,980	61,160	61,340	62,200	62,820
Civilian labor force	62,664	62,609	60,290	59,120	58,390	58,010	57,790	58,430	58,970	58,990	59,120	59,750	60,110
Unemployment	2,584	2,555	1,960	2,420	2,330	2,490	2,400	2,120	1,930	1,960	2,070	2,060	2,270
Employment	60,079	60,055	58,330	56,700	56,060	55,520	55,390	56,310	57,040	57,030	57,050	57,690	57,840
Nonagricultural	50,013	49,678	49,370	48,840	48,820	48,600	48,890	49,100	49,140	48,410	48,300	48,550	47,870
Worked 35 hours or more	39,602	41,747	41,330	40,120	40,680	40,750	41,500	42,120	41,800	41,400	41,610	40,720	39,450
Worked 15-34 hours	4,630	4,532	4,780	4,820	4,880	4,690	4,280	4,290	4,730	4,340	3,650	3,810	3,770
Worked 1-14 hours ⁴	1,150	1,243	1,550	1,570	1,500	1,440	1,400	1,350	1,270	1,260	1,150	960	1,020
With a job but not at work ⁵	4,631	2,156	1,710	2,330	1,760	1,720	1,710	1,340	1,340	1,410	1,890	3,060	3,630
Agricultural	10,066	10,377	8,960	7,860	7,240	6,920	6,500	7,210	7,900	8,620	8,750	9,140	9,970
Worked 35 hours or more	8,067	8,326	6,940	5,520	4,750	4,320	4,040	5,150	6,020	6,820	7,110	6,970	7,840
Worked 15-34 hours	1,653	1,700	1,660	1,770	1,790	1,890	1,700	1,450	1,560	1,510	1,350	1,830	1,810
Worked 1-14 hours ⁴	171	187	210	260	300	280	300	320	160	200	170	140	160
With a job but not at work ⁵	174	165	150	310	400	430	460	290	160	90	120	200	160
Males													
Total labor force ³	46,213	45,839	44,620	44,310	43,990	43,700	43,560	43,860	43,940	43,970	44,040	44,960	45,370
Civilian labor force	44,861	44,460	43,170	42,800	42,440	42,100	41,860	41,990	41,950	41,820	41,850	42,580	42,710
Unemployment	1,789	1,707	1,420	1,900	1,850	2,010	1,950	1,690	1,520	1,550	1,580	1,600	1,760
Employment	43,071	42,753	41,750	40,900	40,590	40,090	39,910	40,300	40,430	40,270	40,270	40,980	40,950
Nonagricultural	34,937	34,729	34,340	33,970	34,030	33,830	34,060	34,010	34,050	33,500	33,480	33,660	33,140
Worked 35 hours or more	29,041	30,639	30,160	29,260	29,400	29,280	29,910	30,290	30,140	29,750	29,940	29,580	28,660
Worked 15-34 hours	2,555	2,333	2,350	2,530	2,680	2,540	2,200	2,120	2,390	2,200	1,770	1,950	1,930
Worked 1-14 hours ⁴	446	469	690	730	660	670	660	600	590	560	460	410	400
With a job but not at work ⁵	2,895	1,288	1,140	1,450	1,290	1,340	1,290	1,000	930	990	1,310	1,720	2,150
Agricultural	8,134	8,024	7,410	6,930	6,560	6,260	5,850	6,290	6,380	6,770	6,790	7,320	7,810
Worked 35 hours or more	7,130	7,187	6,400	5,260	4,600	4,190	3,850	4,860	5,360	5,810	6,020	6,210	6,770
Worked 15-34 hours	775	588	770	1,230	1,380	1,460	1,330	950	780	770	560	880	810
Worked 1-14 hours ⁴	98	101	130	190	230	230	250	220	90	120	100	80	100
With a job but not at work ⁵	130	148	110	250	350	380	420	260	150	70	110	150	130
Females													
Total labor force ³	17,822	18,168	17,140	16,340	15,970	15,930	15,950	16,460	17,040	17,190	17,300	17,210	17,450
Civilian labor force	17,803	18,149	17,120	16,320	15,950	15,910	15,930	16,440	17,020	17,170	17,270	17,170	17,400
Unemployment	795	848	540	520	480	480	450	430	410	410	490	460	510
Employment	17,008	17,302	16,580	15,800	15,470	15,430	15,480	16,010	16,610	16,760	16,780	16,710	16,890
Nonagricultural	15,076	14,949	15,030	14,870	14,790	14,770	14,830	15,090	15,090	14,910	14,820	14,890	14,730
Worked 35 hours or more	10,561	11,108	11,170	10,860	11,280	11,470	11,590	11,830	11,660	11,650	11,670	11,140	10,790
Worked 15-34 hours	2,075	2,199	2,430	2,290	2,200	2,150	2,080	2,170	2,340	2,140	1,880	1,860	1,840
Worked 1-14 hours ⁴	704	774	860	840	840	770	740	750	680	700	690	550	620
With a job but not at work ⁵	1,736	868	570	880	470	380	420	340	410	420	580	1,340	1,480
Agricultural	1,932	2,353	1,550	930	680	660	650	920	1,520	1,850	1,960	1,820	2,160
Worked 35 hours or more	937	1,139	540	260	150	130	190	290	660	1,010	1,090	760	1,070
Worked 15-34 hours	878	1,112	890	540	410	430	370	500	780	740	790	950	1,000
Worked 1-14 hours ⁴	73	86	80	70	70	50	50	100	70	80	70	60	60
With a job but not at work ⁵	44	17	40	60	50	50	40	30	10	20	10	50	30

¹ Estimates are subject to sampling variation which may be large in cases where the quantities shown are relatively small. Therefore, the smaller estimates should be used with caution. All data exclude persons in institutions.

² Beginning in June 1947, the estimates are presented rounded to the nearest thousand, and, for convenience, figures under 100,000 are no longer replaced with asterisks. These changes from previous practice do not reflect an improvement in reliability of the data but are made in order to achieve consistency with other census releases on related subjects. Because of rounding the individual figures no longer add to group totals.

³ Total labor force consists of the civilian labor force and the armed forces.

⁴ Excludes persons engaged only in incidental unpaid family work (less than 15 hours); these persons are classified as not in the labor force.

⁵ Includes persons who had a job or business, but who did not work during the census week because of illness, bad weather, vacation, labor dispute, or because of temporary lay-off with definite instructions to return to work within 30 days of lay-off. Does not include unpaid family workers.

Source: U. S. Department of Commerce, Bureau of the Census.

TABLE A-2: Estimated Number of Wage and Salary Workers¹ in Nonagricultural Establishments, by Industry Division

[In thousands]

Industry division	1947							1946							Annual average	
	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	1943	1939	
Total estimated employment.....	42,139	42,342	41,920	41,824	42,043	41,849	41,803	42,928	42,439	42,065	41,848	41,466	40,877	42,042	30,287	
Manufacturing.....	15,170	15,317	15,237	15,429	15,510	15,475	15,372	15,348	15,271	15,064	15,035	14,876	14,526	17,381	10,078	
Mining.....	864	890	884	856	879	880	853	874	883	883	884	886	873	917	845	
Contract construction 1.....	1,853	1,763	1,685	1,619	1,534	1,502	1,527	1,644	1,713	1,753	1,747	1,713	1,627	1,567	1,150	
Transportation and public utilities.....	4,139	4,115	3,970	3,836	4,020	4,011	4,014	4,071	4,101	4,093	4,064	4,103	4,051	3,619	2,912	
Trade.....	8,556	8,580	8,546	8,552	8,565	8,507	8,552	9,234	8,898	8,667	8,523	8,402	8,337	7,322	6,705	
Finance.....	1,590	1,567	1,561	1,554	1,555	1,546	1,544	1,546	1,543	1,540	1,534	1,534	1,549	1,401	1,382	
Service.....	4,686	4,711	4,690	4,552	4,565	4,561	4,527	4,573	4,555	4,514	4,456	4,430	4,426	3,786	3,228	
Federal, State, and local government.....	5,281	5,399	5,447	5,426	5,415	5,367	5,384	5,638	5,475	5,551	5,605	5,502	5,488	6,049	3,987	

¹ Estimates include all full- and part-time wage and salaried workers in non-agricultural establishments who worked or received pay during the pay period ending nearest the 15th of the month. Proprietors, self-employed persons, domestic servants, and personnel of the armed forces are excluded. These estimates have been adjusted to levels indicated by final 1945 data made available by the Bureau of Employment Security of the Federal Security Agency. Data for the current and immediately preceding months are subject to revision.

² These figures cover all employees of private firms whose major activity is construction. They are not directly comparable with the construction em-

ployment estimates presented in table 2, p. 1111, of the June 1947 issue of this publication, which include self-employed persons, working proprietors, and force-account workers and other employees of nonconstruction firms or public bodies who engage in construction work, as well as all employees of construction firms. An article presenting this other construction employment series will appear in the August issue of this publication, and in every third issue thereafter.

TABLE A-3: Estimated Number of Wage and Salary Workers¹ in Manufacturing Industries, by Major Industry Group

[In thousands]

Major industry group	1947							1946							Annual average	
	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	1943	1939	
All manufacturing	15,170	15,317	15,237	15,429	15,510	15,475	15,372	15,348	15,271	15,064	15,035	14,876	14,526	17,381	10,078	
Durable goods	7,655	7,848	7,781	7,892	7,892	7,857	7,781	7,731	7,721	7,623	7,590	7,486	7,307	10,297	4,357	
Nondurable goods	7,515	7,469	7,456	7,537	7,618	7,618	7,591	7,617	7,550	7,441	7,445	7,390	7,219	7,084	5,720	
Iron and steel and their products	1,822	1,833	1,829	1,842	1,840	1,832	1,823	1,787	1,800	1,761	1,776	1,751	1,704	2,034	1,171	
Electrical machinery	719	744	718	732	775	777	773	771	763	751	734	713	695	914	355	
Machinery, except electrical	1,487	1,520	1,532	1,536	1,522	1,512	1,504	1,489	1,479	1,458	1,434	1,411	1,385	1,585	690	
Transportation equipment, except automobiles	512	583	587	601	596	599	603	600	592	588	590	607	618	2,651	193	
Automobiles	963	960	926	981	971	965	924	943	954	954	960	925	894	845	466	
Nonferrous metals and their products	450	467	479	491	496	498	494	493	488	483	477	471	457	525	283	
Lumber and timber basic products	721	731	715	690	673	660	654	652	659	650	642	643	620	589	465	
Furniture and finished lumber products	502	509	507	516	524	523	514	504	497	489	482	482	469	429	385	
Stone, clay, and glass products	479	492	488	497	465	491	492	492	489	489	486	483	465	422	349	
Textile-mill products and other fibre manufactures	1,271	1,292	1,310	1,336	1,355	1,362	1,354	1,353	1,340	1,322	1,310	1,296	1,281	1,330	1,235	
Apparel and other finished textile products	1,195	1,197	1,162	1,222	1,277	1,274	1,244	1,229	1,209	1,211	1,153	1,170	1,121	1,080	894	
Leather and leather products	390	385	385	398	404	405	403	403	398	395	357	395	396	378	383	
Food	1,646	1,565	1,516	1,505	1,487	1,485	1,513	1,548	1,544	1,490	1,564	1,579	1,512	1,418	1,192	
Tobacco manufactures	98	97	96	95	100	103	104	105	104	102	100	99	98	103	105	
Paper and allied products	453	462	461	465	467	467	465	465	461	454	450	447	442	389	320	
Printing, publishing, and allied industries	692	693	690	689	687	687	683	688	679	672	662	660	656	549	561	
Chemicals and allied products	731	724	744	747	750	747	741	732	728	714	704	692	685	873	421	
Products of petroleum and coal	235	231	228	223	224	222	222	221	222	222	224	223	221	170	147	
Rubber products	264	270	276	289	293	295	294	296	294	290	281	274	264	231	150	
Miscellaneous products	540	553	558	568	574	571	568	577	571	569	560	555	543	563	311	

¹ Estimates include all full- and part-time production and nonproduction workers in manufacturing industries who worked or received pay during the pay period ending nearest the 15th of the month. These estimates have been adjusted to levels indicated by the final 1945 data made available by

the Bureau of Employment Security of the Federal Security Agency. Comparable series from January 1939 are available upon request. Data for the current and immediately preceding months are subject to revision.

TABLE A-4: Estimated Number of Wage and Salary Workers¹ in Manufacturing Industries, by State

(In thousands)

	1947						1946							Annual average 1943
	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	
New England:														
Maine.....	107.9	108.0	108.6	115.3	118.0	117.9	117.8	117.1	117.7	117.6	118.7	115.6	113.7	144.4
New Hampshire.....	79.3	78.7	81.1	83.0	83.5	82.4	83.0	81.6	79.0	79.6	79.2	77.2	79.3	77.0
Vermont.....	39.4	39.4	42.0	42.9	43.2	43.3	43.1	41.8	42.1	41.6	41.4	40.6	40.5	41.3
Massachusetts.....	724.7	734.3	749.9	763.5	765.5	761.6	766.9	762.1	754.1	750.0	741.2	727.9	740.6	835.6
Rhode Island.....	147.0	147.7	150.6	153.8	154.0	153.6	154.4	152.0	150.5	147.7	145.2	141.7	144.6	169.4
Connecticut.....	414.1	417.0	420.1	424.2	425.2	422.0	420.6	416.1	410.9	406.7	396.5	390.9	392.0	504.2
Middle Atlantic:														
New York.....	1,818.6	1,835.4	1,870.6	1,911.4	1,916.1	1,900.1	1,899.0	1,897.8	1,888.8	1,876.0	1,853.2	1,796.6	1,814.2	2,115.7
New Jersey.....	742.5	727.0	738.5	768.6	768.4	770.3	768.0	757.7	753.2	748.9	742.8	733.2	735.8	951.1
Pennsylvania.....	1,487.1	1,494.5	1,507.7	1,511.8	1,513.1	1,518.8	1,515.1	1,511.7	1,458.1	1,482.6	1,466.7	1,444.8	1,423.9	1,579.3
East North Central:														
Ohio.....	1,244.5	1,238.7	1,254.6	1,255.4	1,251.3	1,242.7	1,231.1	1,238.3	1,230.5	1,223.5	1,205.1	1,171.5	1,161.2	1,362.5
Indiana.....	551.1	550.1	554.4	555.8	556.2	549.6	544.2	538.4	538.3	545.1	530.7	511.3	511.7	633.1
Illinois.....	1,238.3	1,232.0	1,248.2	1,249.4	1,251.1	1,244.4	1,236.0	1,229.6	1,203.4	1,195.7	1,186.0	1,165.8	1,159.8	1,263.7
Michigan.....	1,013.1	980.3	1,035.4	1,046.7	1,038.5	1,027.8	1,032.8	1,041.6	1,033.3	1,040.6	1,010.4	982.3	942.9	1,181.8
Wisconsin.....	430.4	425.8	429.8	429.3	424.6	420.7	422.5	420.1	412.8	417.8	411.3	423.8	387.8	442.8
West North Central:														
Minnesota.....	194.5	193.5	195.1	197.8	199.1	198.5	199.6	199.7	195.5	199.3	194.6	193.2	182.8	215.6
Iowa.....	146.5	145.0	146.6	147.0	149.4	148.8	146.9	144.0	132.0	136.4	143.3	136.1	136.3	161.7
Missouri.....	355.5	351.3	355.5	355.9	359.7	355.3	357.9	356.0	343.7	340.2	341.4	333.9	330.4	412.9
North Dakota.....	6.9	6.8	6.5	6.5	6.3	6.4	6.6	6.5	6.0	5.9	6.2	5.9	5.8	5.6
South Dakota.....	11.5	11.3	11.5	11.3	11.5	11.4	11.5	10.5	8.4	8.2	9.9	9.8	10.3	10.3
Nebraska.....	43.1	42.5	41.9	42.8	42.8	44.1	44.5	44.0	39.6	40.3	43.3	41.5	42.0	60.7
Kansas.....	81.0	79.5	79.3	77.8	78.1	78.8	79.6	79.5	74.1	73.8	78.1	76.1	74.8	144.2
South Atlantic:														
Delaware.....	45.2	45.4	44.9	45.0	44.6	45.3	45.2	45.0	45.1	48.0	47.9	45.4	44.7	55.2
Maryland.....	224.3	229.0	228.4	236.2	237.3	237.9	241.3	240.7	238.6	245.5	249.0	238.2	234.5	348.8
District of Columbia.....	17.2	17.1	17.2	17.1	16.9	16.9	17.3	17.0	16.7	16.7	16.4	16.1	16.1	15.6
Virginia.....	207.9	209.4	209.1	210.1	210.1	211.4	213.3	212.6	211.4	211.4	204.7	200.2	197.3	231.9
West Virginia.....	132.5	131.3	133.0	131.9	132.0	131.9	131.9	133.4	131.4	132.9	132.0	128.0	128.4	132.2
North Carolina.....	364.9	365.8	372.1	375.4	375.0	373.2	371.4	368.1	361.6	359.0	358.9	358.2	360.9	399.9
South Carolina.....	188.9	188.7	189.7	189.8	189.5	188.5	188.0	186.7	183.3	182.8	183.9	180.0	179.8	191.8
Georgia.....	246.5	249.7	253.9	254.0	255.9	257.9	*260.0	*263.6	*261.5	*260.8	*257.1	*251.6	*244.9	302.9
Florida.....	77.1	76.6	81.9	86.8	88.1	90.6	90.4	89.4	79.6	77.1	74.3	73.9	76.8	136.0
East South Central:														
Kentucky.....	123.6	123.9	130.0	129.1	129.9	129.1	129.1	127.4	122.2	126.2	126.7	124.8	123.1	131.7
Tennessee.....	245.2	245.7	249.2	249.9	250.9	250.0	247.7	248.6	245.0	243.2	244.8	240.2	235.0	255.9
Alabama.....	224.5	223.4	224.0	224.3	225.0	224.7	222.9	221.6	215.2	212.0	210.3	208.3	202.4	258.5
Mississippi.....	50.9	48.5	50.4	52.1	53.5	52.7	51.5	50.5	47.3	47.2	47.1	46.7	45.4	95.1
West South Central:														
Arkansas.....	71.5	71.4	72.7	67.9	67.5	67.4	70.0	70.1	69.6	69.1	67.8	65.6	65.5	70.7
Louisiana.....	138.3	136.6	135.2	133.3	132.6	132.7	133.5	132.5	128.7	127.0	128.0	132.4	132.9	166.1
Oklahoma.....	53.5	53.0	54.1	54.3	54.6	54.7	55.4	55.6	52.6	52.2	54.7	52.5	52.8	99.7
Texas.....	339.3	324.5	325.9	324.8	326.2	324.8	329.8	328.9	315.9	312.0	315.7	308.3	305.1	424.8
Mountain:														
Montana.....	17.8	17.1	16.6	16.3	16.4	16.6	17.6	17.7	17.7	16.5	16.4	15.9	15.5	15.7
Idaho.....	20.1	19.2	18.4	18.4	17.7	17.9	20.1	21.9	21.6	23.2	23.0	22.2	20.8	15.9
Wyoming.....	6.3	6.1	5.9	5.8	5.8	5.8	6.7	7.0	6.7	5.9	6.1	6.0	5.7	5.1
Colorado.....	54.6	53.8	54.1	53.6	53.5	56.0	56.2	58.7	56.9	55.5	54.5	52.6	50.0	67.5
New Mexico.....	9.9	10.0	9.9	9.9	9.9	10.0	10.2	10.2	10.3	10.5	10.6	10.5	10.1	7.9
Arizona.....	13.2	13.1	13.6	13.3	13.3	13.3	13.9	13.5	12.7	12.2	11.9	12.1	11.1	19.4
Utah.....	24.7	23.6	22.7	22.4	21.7	22.1	24.9	25.1	25.6	27.9	23.6	25.7	19.0	33.5
Nevada.....	3.8	3.6	3.7	3.5	3.5	3.6	3.5	3.5	3.4	3.4	3.4	3.2	3.0	7.9
Pacific:														
Washington.....	170.2	168.4	164.3	*163.0	159.7	159.5	160.9	165.2	174.1	177.8	175.6	175.6	170.8	285.6
Oregon.....	119.1	117.1	115.5	114.4	115.2	116.1	118.4	118.4	122.2	127.4	126.5	121.2	118.2	192.1
California.....	688.3	692.7	698.7	691.7	693.6	696.9	705.9	705.4	725.5	738.8	740.8	700.8	665.1	1,165.5

¹ Comparable series, January 1943 to date, available upon request to U. S. Department of Labor, or cooperating State agency listed below.

² Revised data for earlier months of 1946 available upon request to U. S. Department of Labor.

*Data shown for the two most recent months are subject to revision without notation. Revised data for other months are identified by an asterisk.

Cooperating State Agencies:

Arizona—Employment Security Commission, P. O. Box 111, Phoenix.
California—Division of Labor Statistics and Research, San Francisco 2.
Connecticut—Employment Security Division, Hartford 15.
Delaware—Federal Reserve Bank of Philadelphia, 925 Chestnut St., Philadelphia 1.
Florida—Florida Industrial Commission, Tallahassee.
Georgia—Employment Security Administration, State Office Bldg., Atlanta 3.
Illinois—Department of Labor, Division of Statistics and Research, Chicago 6.
Indiana—Employment Security Division, Indianapolis 12.
Kansas—Kansas State Labor Department, Topeka.
Louisiana—Bureau of Business Research, College of Commerce, Louisiana State University, Baton Rouge 3.
Maryland—Department of Labor and Industry, Baltimore 2.
Massachusetts—Department of Labor and Industries, State House, Boston 33.

Michigan—Department of Labor and Industry, Lansing 13.

Minnesota—Division of Employment and Security, St. Paul 1.

Montana—Unemployment Compensation Commission of Montana, Helena.

Nevada—Employment Security Department, Carson City.

New Jersey—Department of Labor, Trenton 8.

New York—Research and Statistics, Division of Placement and Unemployment Insurance, New York State Department of Labor, 342 Madison Ave., New York 17.

North Carolina—North Carolina Department of Labor, Raleigh.

Oklahoma—Oklahoma Employment Security Commission, American National Bldg., Oklahoma City 2.

Pennsylvania—Federal Reserve Bank of Philadelphia, 925 Chestnut St., Philadelphia 1.

Rhode Island—Department of Labor, Division of Census and Statistics, Providence 2.

Texas—Bureau of Business Research, University of Texas, Austin 12.

Utah—Department of Employment Security, Salt Lake City 13.

Virginia—Division of Research and Statistics, State Department of Labor and Industry, Richmond 21.

Washington—Office of Unemployment Compensation and Placement, P. O. Box 367, Olympia.

Wisconsin—Industrial Commission of Wisconsin, Madison 3.

TABLE A-5: Estimated Number of Production Workers in Manufacturing Industries¹

[In thousands]

Industry group and industry	1947							1946							Annual averages	
	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	1943	1939	
All manufacturing	12,276	12,397	12,341	12,524	12,614	12,593	12,511	12,514	12,449	12,253	12,244	12,101	11,767	14,560	8,192	
Durable goods	6,309	6,483	6,426	6,528	6,532	6,502	6,429	6,393	6,379	6,281	6,249	6,160	5,984	8,727	3,611	
Nondurable goods	5,967	5,914	5,915	5,996	6,082	6,091	6,082	6,121	6,070	5,972	5,995	5,941	5,783	5,834	4,581	
Durable goods																
Iron and steel and their products	1,547	1,557	1,555	1,567	1,567	1,562	1,552	1,521	1,535	1,500	1,514	1,490	1,445	1,761	991	
Blast furnaces, steel works, and rolling mills		497.0	491.1	486.5	482.3	483.3	479.7	467.0	481.5	473.5	480.1	480.0	469.5	516.7	388.4	
Gray-iron and semisteel castings		85.3	85.7	86.5	87.1	87.1	86.2	84.4	84.1	81.9	82.1	81.6	80.7	81.5	58.4	
Malleable-iron castings		26.5	25.8	25.6	25.7	25.4	25.1	24.2	24.8	24.4	24.4	24.1	23.6	26.5	18.0	
Steel castings		48.6	49.5	49.4	49.5	49.8	50.5	51.5	51.2	48.8	50.7	50.2	50.2	83.0	30.1	
Cast-iron pipe and fittings		20.4	20.5	19.9	20.2	20.1	19.8	19.2	19.4	19.1	18.7	16.9	18.3	16.7	16.5	
Tin cans and other tinware		42.4	41.8	41.9	41.1	41.3	41.6	41.5	41.3	42.2	44.8	44.4	43.4	32.4	31.8	
Wire drawn from purchased rods		26.4	26.3	30.7	29.7	30.2	30.5	29.9	29.9	29.2	29.8	29.1	28.7	36.0	22.0	
Wirework		39.6	39.2	41.4	42.3	39.7	41.9	40.5	40.9	41.3	41.3	39.5	36.5	32.8	30.4	
Cutlery and edge tools		23.3	25.6	27.0	27.9	27.9	27.8	27.7	27.3	25.8	25.9	25.7	25.4	21.8	15.4	
Tools (except edge tools, machine tools, files and saws)		25.2	24.7	26.6	27.0	26.7	26.7	26.8	26.4	26.8	26.4	25.6	24.3	27.8	15.3	
Hardware		49.5	50.1	50.4	50.9	50.6	50.1	49.6	49.5	48.3	47.4	45.9	44.8	45.3	35.7	
Plumbers' supplies		29.2	30.0	30.8	30.5	30.7	30.1	29.8	29.2	23.5	28.1	27.1	25.8	23.0	24.6	
Stoves, oil burners, and heating equipment, not elsewhere classified		62.8	63.0	62.8	64.2	63.5	62.8	60.8	62.0	60.3	59.4	56.8	54.0	55.6	46.1	
Steam and hot-water heating apparatus and steam fittings		48.1	48.9	50.5	52.5	52.5	52.6	51.0	51.4	50.2	48.9	48.0	47.7	59.3	30.3	
Stamped and enameled ware and galvanizing		82.7	83.8	84.9	86.0	85.5	84.9	84.5	83.7	82.1	81.5	79.0	75.4	89.3	55.6	
Fabricated structural and ornamental metalwork		58.7	59.0	58.9	58.8	57.9	57.5	57.1	56.9	55.1	56.1	55.5	53.2	71.0	35.5	
Metal doors, sash, frames, molding, and trim		9.3	9.1	9.8	10.0	10.1	10.2	10.1	10.1	10.0	10.2	9.8	8.8	12.8	7.7	
Bolts, nuts, washers, and rivets		21.2	21.5	21.7	21.5	21.7	21.6	21.2	21.0	20.6	20.4	18.7	17.6	29.1	14.3	
Forgings, iron and steel		27.2	26.8	27.3	27.4	27.3	26.9	26.7	26.7	26.5	26.2	26.3	25.5	40.2	15.4	
Wrought pipe, welded and heavy-riveted		12.7	13.4	13.6	13.3	13.8	13.6	13.2	13.8	13.1	13.4	12.8	11.5	25.8	8.4	
Screw-machine products and wood screws		27.7	28.0	29.1	29.4	29.5	29.4	29.3	29.3	29.0	28.5	27.7	26.8	49.6	16.9	
Steel barrels, kegs, and drums		6.1	6.3	6.4	6.2	6.1	6.2	6.1	6.3	6.3	6.2	6.4	5.8	7.8	6.1	
Firearms		14.2	14.1	14.4	14.2	14.3	14.1	14.0	14.2	14.2	14.2	14.0	13.3	66.1	5.0	
Electrical machinery	557	574	554	567	599	601	598	597	590	579	563	545	526	741	259	
Electrical equipment		314.7	307.8	312.1	316.8	318.1	315.7	314.8	310.9	307.6	300.1	290.7	282.5	460.3	180.8	
Radio and phonographs		81.8	85.7	89.4	92.0	92.5	92.8	93.5	91.5	88.5	85.2	82.8	76.7	114.7	43.5	
Communication equipment		80.9	67.7	70.8	91.6	92.2	92.4	92.6	92.2	90.6	89.0	86.4	85.4	110.4	32.1	
Machinery, except electrical	1,152	1,185	1,194	1,197	1,189	1,181	1,173	1,161	1,150	1,131	1,112	1,092	1,066	1,293	529	
Machinery and machine-shop products		381.8	383.6	386.0	385.6	385.1	381.9	379.6	377.7	370.3	363.2	356.6	351.5	490.4	202.3	
Engines and turbines		43.1	44.4	44.9	45.6	45.5	45.4	45.6	45.6	44.8	45.3	44.9	43.5	68.8	18.7	
Tractors		56.4	55.1	55.0	54.7	55.0	54.8	54.5	53.7	53.7	52.0	52.8	52.4	52.4	31.3	
Agricultural machinery, excluding tractors		51.4	50.2	49.5	46.9	46.8	46.1	44.8	43.5	42.3	41.2	40.7	40.8	37.7	27.8	
Machine tools		53.4	55.1	57.2	58.0	59.0	59.8	60.6	60.3	62.0	62.0	61.3	59.2	109.7	36.6	
Machine-tool accessories		44.9	46.2	47.8	49.0	50.1	51.3	51.5	51.8	51.2	50.6	49.1	47.5	88.4	25.1	
Textile machinery		38.6	38.4	37.8	37.6	37.1	36.4	35.3	34.7	33.9	33.4	32.7	31.7	28.5	21.9	
Pumps and pumping equipment		58.6	59.0	59.6	59.8	59.4	58.8	58.9	58.3	57.4	57.5	56.9	54.6	76.8	24.2	
Typewriters		18.1	23.8	23.4	23.3	23.0	22.7	22.3	22.2	21.3	20.5	19.4	18.2	12.0	16.2	
Cash registers, adding and calculating machines		37.7	40.7	40.5	39.8	38.7	37.6	37.3	36.4	35.4	34.6	33.2	33.5	34.8	19.7	
Washing machines, wringers, and driers, domestic		14.8	14.5	14.2	13.8	13.3	12.7	12.5	12.6	12.0	11.9	11.5	10.3	13.3	7.5	
Sewing machines, domestic and industrial		11.7	11.6	11.5	11.3	11.1	10.9	10.7	10.5	10.3	10.1	9.7	9.8	10.7	7.8	
Refrigerators and refrigeration equipment		78.3	74.3	72.9	70.7	67.1	68.2	65.2	64.2	63.5	60.2	60.5	59.2	54.4	35.2	
Transportation equipment, except automobiles	395	463	466	477	471	472	474	473	464	457	455	468	476	2,508	159	
Locomotives		24.3	23.8	25.1	26.0	26.9	26.6	27.1	27.1	27.4	27.1	26.8	26.2	34.1	6.5	
Cars, electric and steam-railroad		54.9	55.2	55.6	54.0	53.5	51.2	50.8	50.3	48.5	47.9	46.6	45.5	60.5	24.5	
Aircraft and parts, excluding aircraft engines		133.9	138.2	141.9	141.2	141.9	143.9	144.7	146.3	143.2	139.5	134.2	128.6	794.9	39.7	
Aircraft engines		26.9	27.0	28.1	28.0	28.6	29.5	29.0	29.3	28.6	27.6	27.5	26.5	233.5	8.9	
Shipbuilding and boatbuilding		140.9	140.3	143.9	140.4	140.7	142.4	142.8	133.8	133.9	139.0	158.3	173.9	1,225.2	69.2	
Motorcycles, bicycles, and parts		13.3	12.8	12.8	12.8	12.5	12.2	12.1	11.7	11.5	11.0	10.6	10.4	10.0	7.0	
Automobiles	785	789	751	807	798	791	755	774	778	774	788	755	725	714	402	
Nonferrous metals and their products	385	401	412	424	430	432	428	426	422	417	411	406	392	449	229	
Smelting and refining, primary, of nonferrous metals		39.8	39.6	40.8	41.0	41.0	40.2	40.2	39.3	38.6	37.5	36.9	35.4	56.4	27.6	
Alloying and rolling and drawing of nonferrous metals except aluminum		57.1	59.8	61.7	62.4	63.7	63.0	62.8	62.0	61.5	61.7	61.1	59.5	75.8	38.8	
Clocks and watches		27.3	27.6	28.0	28.1	28.5	28.3	28.2	28.5	28.2	27.8	27.5	26.1	25.2	20.3	
Jewelry (precious metals) and jewelers' findings		16.5	16.7	17.2	17.7	17.8	17.9	17.9	17.4	17.4	17.9	17.4	16.7	15.9	14.5	
Silverware and plated ware		15.9	15.8	15.8	15.8	15.8	15.6	15.2	15.1	14.7	14.6	14.2	13.7	11.8	12.1	

See footnotes at end of table.

TABLE A-5: Estimated Number of Production Workers in Manufacturing Industries¹—Continued

[In thousands]

Industry group and industry	1947							1946							Annual averages	
	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	1943	1939	
Durable goods—Continued																
Nonferrous metals and their products—Con.																
Lighting equipment.....		31.1	31.7	32.4	33.0	33.0	32.3	31.6	31.2	31.2	30.6	30.1	29.1	24.3	20.5	
Aluminum manufactures.....		42.8	46.2	48.9	50.6	50.8	51.1	51.3	50.9	50.6	49.7	49.4	48.6	79.4	23.5	
Sheet-metal work, not elsewhere classified.....		25.4	25.4	25.9	26.4	26.5	26.4	26.9	27.2	26.7	26.1	26.2	25.0	29.5	18.8	
Lumber and timber basic products ²	658	665	651	627	611	598	592	592	599	590	583	584	561	535	420	
Sawmills and logging camps.....		536.3	525.3	502.8	488.5	477.0	471.1	472.8	479.5	473.8	468.5	472.5	454.1	435.8	313.7	
Planing and plywood mills.....		128.6	126.1	124.7	122.7	121.1	120.7	119.3	119.1	116.6	114.3	111.6	107.1	99.2	79.1	
Furniture and finished lumber products ²	419	426	425	433	440	441	432	425	419	411	405	405	392	366	328	
Mattresses and bedsprings.....		29.9	29.8	29.7	31.6	31.4	31.2	30.6	31.5	30.1	29.9	28.7	27.1	21.7	20.5	
Furniture.....		227.0	225.9	229.2	233.6	235.1	230.1	227.2	223.5	220.0	216.5	217.3	211.1	200.0	177.9	
Wooden boxes, other than cigar.....		36.2	36.3	36.5	35.9	35.2	35.1	34.3	34.2	33.6	33.3	33.4	32.5	35.4	28.3	
Caskets and other morticians' goods.....		19.2	19.3	19.6	20.1	19.9	19.9	19.6	18.7	17.3	17.4	17.2	17.2	14.2	13.9	
Wood preserving.....		18.6	18.2	18.2	17.8	17.6	17.3	16.8	16.5	16.5	16.6	16.4	16.0	12.4	12.6	
Wood, turned and shaped.....		30.1	30.5	33.5	33.8	34.4	32.7	31.9	30.7	30.3	30.1	30.2	28.8	26.4	24.6	
Stone, clay, and glass products ²	411	423	418	429	427	424	425	424	422	422	418	415	401	360	294	
Glass and glassware.....		120.3	122.1	122.8	121.8	119.7	122.7	122.4	122.9	124.2	123.0	122.3	118.2	99.8	71.4	
Glass products made from purchased glass.....		12.4	12.8	13.3	13.4	13.4	13.2	12.9	12.7	12.4	12.0	12.0	11.5	11.3	10.0	
Cement.....		35.2	29.5	35.4	34.9	35.0	35.0	35.2	34.7	34.6	34.9	34.9	33.8	27.1	24.4	
Brick, tile, and terra cotta.....		73.0	72.1	72.3	71.1	70.5	70.4	69.3	69.4	70.9	70.7	70.7	69.6	52.5	58.0	
Pottery and related products.....		55.5	56.0	56.2	56.2	56.2	55.3	55.0	54.1	53.7	53.5	52.6	50.9	45.0	33.8	
Gypsum.....		6.1	5.7	5.9	5.9	6.1	6.1	6.2	6.1	5.8	5.9	5.8	5.5	4.5	4.9	
Wall board, plaster (except gypsum), and mineral wool.....		11.1	11.0	10.8	10.8	11.1	11.1	11.1	11.0	10.8	10.8	10.9	8.8	11.1	8.1	
Lime.....		9.3	9.4	9.2	9.0	9.0	8.9	8.9	9.0	9.0	8.9	8.9	8.8	9.3	9.5	
Marble, granite, slate, and other products.....		16.3	16.4	17.8	17.7	17.4	16.9	17.3	17.2	17.2	17.4	17.3	16.9	12.5	18.5	
Abrasives.....		18.7	19.4	19.6	20.1	20.1	20.3	20.1	20.0	19.8	19.3	19.1	18.8	23.4	7.7	
Asbestos products.....		21.1	20.9	21.0	21.4	21.4	21.6	21.7	21.6	21.3	20.5	20.1	19.3	22.0	15.9	
Nondurable goods																
Textile-mill products and other fiber manufactures.....	1,158	1,179	1,197	1,223	1,242	1,247	1,242	1,242	1,230	1,215	1,204	1,189	1,175	1,237	1,144	
Cotton manufactures, except smallwares.....		453.3	460.2	467.7	470.1	471.5	470.1	468.8	465.3	459.5	455.8	452.3	445.0	486.5	396.0	
Cotton smallwares.....		12.4	13.2	13.7	14.2	14.4	14.6	14.5	14.3	14.5	14.3	14.1	13.7	16.5	13.3	
Silk and rayon goods.....		90.8	91.9	94.0	95.2	95.4	95.7	95.6	94.8	93.8	93.0	92.6	90.9	95.8	119.8	
Woolen and worsted manufactures, except dyeing and finishing.....		146.7	148.1	153.3	158.1	162.1	163.0	164.4	162.2	160.5	159.7	155.8	155.0	166.9	149.2	
Hosiery.....		108.0	111.9	117.0	120.1	120.0	119.0	118.5	117.5	115.8	113.8	114.1	113.3	117.1	159.1	
Knitted cloth.....		9.1	9.3	9.8	10.3	10.4	10.5	10.9	11.2	11.2	11.2	11.2	11.1	11.8	10.9	
Knitted outerwear and knitted gloves.....		24.2	25.7	27.4	29.4	30.1	30.4	31.7	31.5	30.8	30.4	29.7	30.0	32.3	28.1	
Knitted underwear.....		38.0	37.6	37.9	37.8	37.3	36.6	36.0	35.6	35.2	34.9	35.2	34.9	41.8	38.5	
Dyeing and finishing textiles, including woolen and worsted.....		64.0	64.6	65.4	66.3	66.4	66.0	65.0	64.8	64.1	64.1	63.8	63.0	67.9	66.9	
Carpets and rugs, wool.....		28.5	28.3	28.0	27.8	27.2	26.7	26.4	25.7	25.0	24.6	24.2	23.7	22.6	25.6	
Hats, fur-felt.....		11.2	11.0	10.3	11.9	12.0	12.0	11.9	11.7	11.5	11.3	9.0	10.7	10.0	14.6	
Jute goods, except felts.....		3.8	3.8	3.8	3.9	3.9	3.8	3.7	3.6	3.8	3.8	3.7	3.8	3.9	3.6	
Cordage and twine.....		13.8	14.1	14.5	14.7	15.0	15.0	15.4	15.2	15.4	15.2	14.9	14.4	16.9	12.1	
Apparel and other finished textile products ²	1,040	1,040	1,037	1,066	1,120	1,119	1,090	1,079	1,063	1,065	1,049	1,030	983	958	790	
Men's clothing, not elsewhere classified.....		284.5	280.5	283.5	287.5	287.8	284.6	282.7	279.8	270.3	266.6	265.6	257.7	265.9	229.6	
Shirts, collars, and nightwear.....		74.4	73.2	73.3	74.1	73.7	71.4	70.5	68.9	65.2	65.0	65.1	64.8	67.2	74.0	
Underwear and neckwear, men's.....		16.8	17.4	18.0	18.1	18.5	18.3	18.8	18.6	18.5	17.8	16.9	15.9	16.3	17.0	
Work shirts.....		14.1	14.8	15.7	16.5	16.8	16.3	15.9	15.4	15.0	15.2	14.8	15.0	18.5	14.1	
Women's clothing, not elsewhere classified.....		389.1	389.3	407.5	442.3	439.4	421.8	414.4	406.8	417.9	415.0	402.1	371.1	345.3	286.2	
Corsets and allied garments.....		17.5	17.6	17.6	17.5	17.0	16.8	16.9	16.6	16.3	15.9	15.7	15.4	16.5	18.8	
Millinery.....		20.1	20.1	22.0	26.2	26.0	24.2	22.5	20.2	24.3	24.6	23.7	21.1	23.3	25.5	
Handkerchiefs.....		4.6	4.7	4.8	4.9	4.8	4.7	4.6	4.4	4.4	4.2	4.2	4.0	5.7	5.1	
Curtains, draperies, and bedspreads.....		22.5	22.2	22.3	23.5	24.8	25.7	26.9	29.5	30.2	28.2	27.7	27.4	25.2	17.8	
Housefurnishings, other than curtains.....		28.6	29.3	29.0	28.7	28.8	29.1	29.6	29.3	30.1	29.5	29.3	27.8	24.0	11.2	
Textile bags.....		27.1	27.8	28.3	29.4	29.7	29.3	29.8	28.9	28.2	27.1	27.0	28.3	19.6	12.6	
Leather and leather products ²	340	346	345	358	363	364	362	362	357	355	358	356	357	340	347	
Leather.....		45.5	45.9	46.3	46.0	46.3	45.8	45.4	43.3	44.0	44.4	44.3	44.0	46.5	50.0	
Boot and shoe cut stock and findings.....		18.0	18.3	19.4	20.2	20.1	20.3	20.6	20.7	20.3	20.1	20.7	20.1	19.2	20.0	
Boots and shoes.....		214.4	212.6	220.7	224.4	224.2	222.6	221.7	218.6	216.3	219.3	217.3	219.4	205.6	230.9	
Leather gloves and mittens.....		12.1	12.0	12.3	12.7	12.8	13.1	13.7	13.9	14.0	13.9	14.0	14.2	15.4	10.0	
Trunks and suitcases.....		12.2	12.1	13.2	13.6	13.7	13.9	14.7	14.8	15.0	14.6	14.8	14.4	13.7	8.3	
Food.....	1,203	1,114	1,077	1,068	1,055	1,059	1,098	1,139	1,141	1,091	1,175	1,184	1,119	1,056	855	
Slaughtering and meat packing.....		145.9	143.3	139.4	143.5	148.9	154.4	150.7	138.9	84.4	94.8	138.4	123.4	164.6	120.5	
Butter.....		25.6	25.0	23.8	22.8	22.4	22.1	23.5	24.4	24.9	25.1	26.2	26.4	21.8	17.9	
Condensed and evaporated milk.....		15.7	15.0	14.4	13.6	13.4	13.1	12.9	13.1	13.7	14.2	15.0	15.7	13.0	9.7	
Ice cream.....		22.1	20.1	18.5	17.1	16.4	16.1	16.4	16.8	17.6	18.9	20.2	20.9	14.9	15.7	
Flour.....		29.5	28.8	30.0	30.4	30.3	30.5	30.7	30.9	30.6	29.7	29.5	28.3	28.5	24.8	
Feeds, prepared.....		22.5	21.4	21.9	22.3	21.6	21.9	21.2	21.8	21.7	21.0	22.4	21.7	21.7	15.4	
Cereal preparations.....		9.5	9.3	10.3	9.8	9.8	10.2	10.8	11.0	10.8	10.9	10.1	9.5	9.9	7.5	
Baking.....		247.4	245.8	247.3	245.0	243.9	249.0	252.7	249.0	241.3	241.4	236.9	234.0	254.0	230.7	

See footnotes at end of table.

TABLE A-5: Estimated Number of Production Workers in Manufacturing Industries¹—Continued

(In thousands)

Industry group and industry	1947							1946							Annual averages	
	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	1943	1939	
Nondurable goods—Continued																
Food—Continued																
Sugar refining, cane.....		16.3	15.8	15.3	14.4	13.2	14.6	14.9	12.5	11.5	12.3	14.0	14.2	13.9	14.1	
Sugar, beet.....		5.8	5.3	4.6	4.5	5.0	9.2	16.1	22.0	19.5	8.0	6.8	4.5	8.4	10.4	
Confectionery.....		53.0	54.6	56.7	56.4	55.4	56.9	58.6	57.1	55.8	52.2	48.7	46.0	56.1	49.7	
Beverages, nonalcoholic.....		26.8	25.0	23.8	22.7	22.4	22.5	23.1	23.2	23.0	24.1	25.6	25.7	27.1	21.3	
Malt liquors.....		58.6	55.6	54.1	52.8	52.4	52.7	53.7	53.3	53.0	54.2	52.4	52.0	45.6	36.1	
Canning and preserving.....		91.3	79.9	79.9	76.5	81.7	94.6	115.8	131.9	173.3	245.0	206.5	183.9	133.7	131.5	
Tobacco manufactures.....	84	84	83	82	86	89	90	92	91	89	87	86	85	91	93	
Cigarettes.....		33.3	32.9	32.8	32.9	33.4	34.1	34.5	34.5	33.9	33.7	33.6	33.6	33.9	27.4	
Cigars.....		38.0	37.0	36.5	40.1	42.1	41.8	42.9	42.3	41.4	40.0	38.7	37.6	42.7	50.9	
Tobacco(chewing and smoking) and snuff.....		6.8	6.7	6.5	7.0	7.2	7.5	7.8	8.0	7.8	7.6	7.7	7.6	8.4	9.2	
Paper and allied products.....	373	381	381	385	387	387	386	387	383	376	372	369	365	324	265	
Paper and pulp.....		172.9	171.8	171.2	172.5	172.7	172.0	171.8	170.6	167.7	167.7	167.8	166.2	149.7	137.5	
Paper goods, other.....		47.1	47.1	47.4	47.7	47.8	47.5	47.9	48.0	47.2	46.6	46.2	45.5	47.8	37.6	
Envelopes.....		10.8	10.9	10.9	11.0	11.0	10.9	11.0	10.9	10.5	10.4	10.3	10.2	10.3	8.7	
Paper bags.....		14.5	14.9	15.5	15.6	15.8	16.0	15.8	15.4	15.1	14.7	14.0	14.1	12.4	11.1	
Paper boxes.....		85.3	86.5	89.7	90.8	90.9	91.3	92.6	91.8	89.6	87.4	87.2	85.6	83.3	69.2	
Printing, publishing, and allied industries ²	422	423	422	421	421	420	417	420	415	410	401	399	397	331	328	
Newspapers and periodicals.....		142.0	141.2	139.9	138.7	137.3	135.3	136.7	135.0	133.9	131.7	131.1	130.1	113.0	118.7	
Printing, book and job.....		175.8	175.1	176.3	176.7	177.9	178.0	178.0	176.5	174.3	170.1	168.6	169.2	138.7	127.6	
Lithographing.....		32.4	32.7	32.7	32.8	32.8	32.5	32.7	32.5	32.0	31.6	31.1	30.8	25.9	26.3	
Bookbinding.....		37.5	37.4	37.3	37.0	36.7	36.5	36.9	36.4	35.6	34.3	34.5	33.7	29.4	25.8	
Chemicals and allied products.....	547	542	561	565	569	568	564	555	550	539	530	520	516	734	288	
Paints, varnishes, and colors.....		37.0	37.4	37.3	37.3	36.8	36.3	36.4	35.9	36.0	36.0	35.9	35.6	29.5	28.2	
Drugs, medicines, and insecticides.....		52.3	53.3	53.9	54.3	54.0	54.2	53.8	53.5	53.1	52.1	51.7	51.4	45.5	27.4	
Perfumes and cosmetics.....		9.3	9.3	9.7	10.3	10.7	10.9	11.5	12.4	12.6	12.2	12.6	12.6	11.5	10.4	
Soap.....		15.6	15.2	15.3	15.4	15.1	14.5	14.3	13.8	13.7	14.2	14.1	14.0	13.3	13.6	
Rayon and allied products.....		50.0	58.5	58.3	58.4	59.1	58.9	58.6	58.9	57.8	57.4	57.3	57.0	52.1	48.3	
Chemicals, not elsewhere classified.....		126.7	125.4	125.3	124.6	124.2	124.3	122.9	120.5	118.1	116.6	117.2	117.2	116.7	69.6	
Explosives and safety fuses.....		13.8	13.9	13.9	13.9	13.7	13.4	12.9	12.7	12.9	12.8	12.6	12.3	90.5	7.3	
Compressed and liquefied gases.....		6.2	6.1	6.0	5.9	6.0	5.9	5.7	5.8	5.3	5.7	5.9	5.8	6.3	4.0	
Ammunition, small-arms.....		7.0	6.9	6.7	6.7	6.6	6.6	6.6	6.8	6.9	7.4	4.9	7.6	154.1	4.3	
Fireworks.....		2.9	2.9	2.8	2.6	2.7	3.0	3.5	3.5	3.4	3.2	2.9	2.8	28.2	1.2	
Cottonseed oil.....		9.9	11.0	13.0	15.0	16.5	17.3	18.9	20.5	17.5	13.0	10.8	8.4	17.7	15.2	
Fertilizers.....		21.5	25.6	27.4	28.8	27.9	25.6	23.1	22.1	22.0	22.3	20.9	19.3	22.7	18.8	
Products of petroleum and coal.....	163	160	158	154	155	155	154	155	155	155	157	156	155	125	106	
Petroleum refining.....		101.4	100.4	97.6	98.7	98.5	98.3	99.4	99.1	99.2	99.8	100.1	100.1	80.6	72.8	
Coke and byproducts.....		26.7	26.3	25.9	25.8	26.1	25.6	25.0	25.7	25.8	25.9	25.8	25.6	24.6	21.7	
Paving materials.....		1.8	1.9	1.9	1.8	1.7	1.6	1.6	1.8	2.0	2.3	2.2	2.1	1.6	2.4	
Roofing materials.....		12.7	12.5	12.3	12.1	12.3	12.4	12.5	12.7	12.6	12.6	12.2	12.0	9.6	8.0	
Rubber products.....	212	218	223	234	238	240	240	242	240	236	229	223	214	194	121	
Rubber tires and inner tubes.....		100.6	102.2	105.6	107.8	108.9	110.1	111.7	112.0	110.4	106.6	102.8	99.1	86.7	54.1	
Rubber boots and shoes.....		18.0	19.2	20.0	20.2	20.3	19.9	19.7	19.2	18.4	18.1	18.0	17.5	21.8	14.8	
Rubber goods, other.....		67.3	68.8	74.2	75.2	76.4	76.6	77.0	76.2	74.8	73.3	72.1	69.3	73.1	51.8	
Miscellaneous industries.....	416	427	431	440	446	443	439	448	445	441	433	429	417	445	244	
Instruments(professional and scientific), and fire-control equipment.....		19.7	19.4	19.9	20.0	20.1	20.1	20.4	19.4	20.6	20.9	21.2	21.2	71.2	11.1	
Photographic apparatus.....		26.1	25.8	25.5	25.4	25.3	25.3	25.4	25.4	25.3	25.3	25.6	25.2	29.2	17.3	
Optical instruments and ophthalmic goods.....		20.2	20.6	20.9	21.3	21.6	21.8	21.9	21.6	21.5	21.2	21.2	21.1	27.3	11.6	
Pianos, organs, and parts.....		10.6	10.6	10.6	10.8	10.6	10.4	9.5	9.9	9.7	9.4	9.4	9.1	10.0	7.6	
Games, toys, and dolls.....		24.4	23.8	23.8	23.1	21.9	21.3	24.2	25.2	24.3	23.6	22.8	20.8	15.6	18.7	
Buttons.....		8.2	8.6	9.1	9.4	9.6	10.1	10.5	10.2	10.6	10.6	10.6	10.1	10.8	11.0	
Fire extinguishers.....		2.1	2.0	2.1	2.2	2.3	2.1	2.2	2.1	2.1	2.1	2.1	2.0	7.6	1.0	

¹ Data are based on reports from co-operating establishments covering production and related workers. Major industry groups have been adjusted to levels indicated by final 1945 data made available by the Bureau of Employment Security of the Federal Security Agency. The Bureau has not prepared estimates for certain industries, and with the exception of the industries in the major industry groups indicated below, estimates for individual industries have been adjusted only to levels indicated by the 1939 Census of Manufactures but not to Federal Security Agency data. For these reasons the sums of the individual industry estimates may not agree

with the totals shown for the major industry groups. Data shown for the two most recent months are subject to revision without notation. Revised data for earlier months are identified by an asterisk.

² Data for the individual industries comprising the major industry groups have been adjusted to levels indicated by final 1945 data made available by the Bureau of Employment Security of the Federal Security Agency. Comparable series from January 1939 available upon request. More recently adjusted data for individual industries comprising the major industry groups indicated below supersede data shown in publications dated prior to:

Major industry	Mimeo-graphed release	Monthly Labor Review
Furniture and finished lumber products.....	June 1947	July 1947
Lumber and timber basic products.....	July 1947	Aug. 1947
Leather and leather products.....	July 1947	Aug. 1947
Stone, clay, and glass products.....	Aug. 1947	Sept. 1947
Printing, publishing, and allied industries.....	Aug. 1947	Sept. 1947

TABLE A-6: Indexes of Production-Worker Employment in Manufacturing Industries¹

[1939 average=100]

Industry group and industry	1947							1946							Annual average
	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	1943	
All manufacturing	149.9	151.3	150.6	152.9	154.0	153.7	152.7	152.8	152.0	149.6	149.5	147.7	143.6	177.7	
Durable goods	174.7	179.5	178.0	180.8	180.9	180.1	178.0	177.0	176.7	173.9	173.1	170.6	165.7	241.7	
Nondurable goods	130.3	129.1	129.1	130.9	132.8	133.0	132.8	133.6	132.5	130.4	130.9	129.7	126.2	127.4	
Durable goods															
Iron and steel and their products	156.1	157.1	156.8	158.0	158.1	157.5	156.5	153.4	154.9	151.2	152.7	150.2	145.7	177.6	
Blast furnaces, steel works, and rolling mills	128.0	126.4	125.3	124.2	124.4	123.5	120.2	124.0	121.9	123.6	123.6	120.9	133.0	133.0	
Gray-iron and semisteel castings	146.0	146.7	148.1	149.1	149.1	147.4	144.5	144.0	140.2	140.5	139.6	138.1	139.4	139.4	
Malleable-iron castings	146.9	143.2	142.1	142.3	141.1	139.2	134.1	137.5	135.5	135.1	133.6	131.0	146.8	146.8	
Steel castings	161.6	164.4	164.3	164.4	165.4	167.7	171.3	170.3	162.0	168.5	166.9	167.0	275.8	275.8	
Cast-iron pipe and fittings	123.7	124.2	120.5	122.4	121.8	120.0	116.2	117.6	115.7	113.4	102.2	110.5	100.8	100.8	
Tin cans and other tinware	133.4	131.7	132.0	129.4	130.1	131.0	130.5	129.9	132.9	141.1	139.9	136.6	102.0	102.0	
Wire drawn from purchased rods	120.1	119.6	139.6	135.0	137.3	138.8	135.9	136.3	132.7	135.7	132.3	130.5	163.8	163.8	
Wirework	130.3	129.0	136.4	139.3	130.6	137.7	133.4	134.6	135.9	136.0	130.1	120.2	108.0	108.0	
Cutlery and edge tools	151.4	165.8	175.2	180.8	180.7	180.5	179.8	177.3	167.4	167.7	166.5	164.8	141.3	141.3	
Tools (except edge tools, machine tools, files, and saws)	164.6	161.6	174.0	176.2	174.6	174.1	175.0	172.4	174.9	172.2	167.2	158.6	181.5	181.5	
Hardware	138.9	140.5	141.3	142.8	141.9	140.4	139.0	139.0	135.5	133.0	128.7	125.7	127.1	127.1	
Plumbers' supplies	118.5	121.8	124.9	123.8	124.7	122.2	120.8	118.6	95.4	113.9	110.0	104.8	93.5	93.5	
Stoves, oil burners, and heating equipment, not elsewhere classified	136.2	136.6	136.1	139.3	137.6	136.2	131.7	134.4	130.8	128.8	123.0	117.0	120.6	120.6	
Steam and hot-water heating apparatus and steam fittings	158.6	161.4	166.5	173.1	173.2	173.5	168.3	169.7	165.7	161.3	158.2	157.3	195.6	195.6	
Stamped and enameled ware and galvanizing	148.9	150.9	152.8	154.9	153.9	152.9	152.2	150.7	147.7	146.7	142.2	135.8	160.5	160.5	
Fabricated structural and ornamental metalwork	165.3	166.1	165.9	165.6	162.9	162.0	160.8	160.3	155.2	157.9	156.1	149.8	200.0	200.0	
Metal doors, sash, frames, molding, and trim	120.3	117.1	126.8	129.7	130.7	131.3	130.2	131.0	129.2	131.3	126.7	114.1	164.9	164.9	
Bolts, nuts, washers, and rivets	148.1	150.0	151.4	150.6	151.5	150.7	148.3	147.1	143.8	142.9	130.6	122.9	203.1	203.1	
Forgings, iron and steel	176.7	174.0	177.7	178.3	177.8	175.0	173.9	173.9	172.1	170.1	170.9	165.9	261.3	261.3	
Wrought pipe, welded and heavy-riveted	151.5	160.3	162.4	158.8	165.2	161.9	158.0	164.8	156.3	159.9	153.4	137.0	308.4	308.4	
Screw-machine products and wood screws	163.7	165.6	171.9	173.6	174.5	173.9	173.0	173.2	171.6	168.3	163.9	158.5	292.9	292.9	
Steel barrels, kegs, and drums	100.7	104.1	104.6	101.4	99.7	102.9	100.1	103.8	104.0	102.7	106.0	95.6	129.1	129.1	
Firearms	283.3	282.8	287.0	283.7	286.6	282.8	280.6	284.0	284.3	284.1	281.0	266.9	1321.8	1321.8	
Electrical machinery	215.0	221.5	213.8	218.7	231.3	232.0	230.8	230.6	227.6	223.4	217.3	210.5	203.2	285.9	
Electrical equipment	174.1	170.3	172.7	175.3	176.0	174.6	174.1	172.0	170.1	166.0	160.8	156.3	254.6	254.6	
Radios and phonographs	188.1	196.9	205.4	211.5	212.7	213.3	215.0	210.2	203.4	195.7	190.3	176.2	263.7	263.7	
Communication equipment	251.9	210.7	220.3	285.2	287.0	287.6	288.4	287.0	282.0	277.0	269.0	265.9	343.6	343.6	
Machinery, except electrical	217.9	224.2	225.9	226.6	225.1	223.5	222.0	219.6	217.7	214.0	210.3	206.6	201.8	244.7	
Machinery and machine-shop products	188.7	189.6	190.8	190.6	190.3	188.8	187.6	186.7	183.0	179.5	176.2	173.7	242.4	242.4	
Engines and turbines	231.3	238.3	240.6	244.4	243.8	243.5	244.5	244.5	240.1	242.6	240.9	233.1	368.6	368.6	
Tractors	180.4	176.1	176.0	174.8	175.9	175.2	174.2	171.6	171.8	166.4	168.7	167.5	167.5	167.5	
Agricultural machinery, excluding tractors	184.9	180.6	177.9	168.6	168.4	165.7	161.0	156.3	152.1	148.1	146.4	146.8	135.7	135.7	
Machine tools	145.9	150.5	156.1	158.4	161.1	163.2	165.3	164.6	169.2	169.2	167.5	161.5	299.5	299.5	
Machine-tool accessories	178.4	183.4	190.0	194.8	199.2	204.0	204.8	205.9	203.6	201.0	195.3	188.7	351.3	351.3	
Textile machinery	176.1	175.3	172.6	171.7	169.5	166.2	161.4	158.5	154.7	152.3	149.2	144.7	130.1	130.1	
Pumps and pumping equipment	242.0	243.3	245.8	246.6	245.1	242.7	243.1	240.6	237.0	237.1	234.6	225.2	317.0	317.0	
Typewriters	111.7	146.7	144.4	144.0	142.0	139.8	137.2	137.2	131.6	126.6	119.5	112.2	73.8	73.8	
Cash registers, adding and calculating machines	191.6	206.9	205.7	202.4	196.8	191.2	189.3	185.2	179.9	175.8	168.9	170.0	177.0	177.0	
Washing machines, wringers and driers, domestic	198.6	193.9	190.1	184.5	178.4	169.6	166.8	168.2	160.3	158.7	153.8	137.8	178.8	178.8	
Sewing machines, domestic and industrial	149.5	147.6	146.7	144.5	142.1	138.6	136.2	133.6	130.8	128.3	123.2	124.8	136.6	136.6	
Refrigerators and refrigeration equipment	222.6	211.4	207.4	201.0	190.8	194.1	185.6	182.6	180.6	171.2	172.1	168.4	154.9	154.9	
Transportation equipment, except automobiles	248.9	291.8	293.7	300.8	296.7	297.6	298.4	298.2	292.4	287.8	286.8	294.7	299.9	1560.1	
Locomotives	376.0	367.4	388.0	402.3	416.3	410.9	418.8	419.4	423.6	419.4	414.0	405.1	526.8	526.8	
Cars, electric- and steam-railroad	223.9	224.9	226.6	220.3	218.2	208.6	207.2	205.2	197.6	195.4	190.1	185.7	246.5	246.5	
Aircraft and parts, excluding aircraft engines	337.4	348.4	357.6	355.8	357.6	362.8	364.8	368.8	360.9	351.6	338.3	324.2	2003.5	2003.5	
Aircraft engines	302.5	303.4	315.8	314.9	321.8	331.4	326.2	329.8	321.8	310.5	309.3	298.3	2625.7	2625.7	
Shipbuilding and boatbuilding	203.5	202.7	207.8	202.8	203.3	205.7	206.2	193.2	193.3	200.8	228.6	251.2	1769.4	1769.4	
Motorcycles, bicycles, and parts	190.5	183.6	184.0	184.0	179.4	175.1	173.6	168.1	165.0	158.0	152.7	148.6	143.7	143.7	
Automobiles	195.0	196.2	186.5	200.5	198.2	196.6	187.7	192.3	193.3	192.3	196.0	187.8	180.2	177.5	
Nonferrous metals and their products	168.2	175.1	179.6	184.8	187.5	188.5	186.9	185.8	184.0	182.0	179.5	177.3	171.2	196.0	
Smelting and refining, primary, of nonferrous metals	143.9	143.2	147.6	148.2	148.5	145.5	145.4	142.1	139.9	135.6	133.6	128.2	204.3	204.3	
Alloying and rolling and drawing of nonferrous metals except aluminum	147.2	154.0	158.8	160.7	164.0	162.2	161.7	159.7	158.4	159.0	157.4	153.2	195.2	195.2	
Clocks and watches	134.6	135.9	138.0	138.5	140.7	139.3	139.1	140.5	138.8	136.8	135.5	128.5	124.2	124.2	
Jewelry (precious metals) and jewelers' findings	114.1	115.8	118.9	122.8	123.5	124.0	123.9	120.3	120.8	123.8	120.6	115.5	110.5	110.5	
Silverware and plated ware	130.8	130.6	130.2	130.5	129.8	128.5	125.5	124.5	121.6	120.0	117.2	112.6	96.9	96.9	
Lighting equipment	152.0	154.7	158.0	161.0	161.0	157.9	154.4	152.5	152.3	149.2	146.8	142.1	118.9	118.9	
Aluminum manufactures	181.6	196.1	207.8	214.9	215.6	217.2	217.7	216.3	214.9	211.0	209.6	206.4	337.4	337.4	
Sheet-metal work, not elsewhere classified	135.5	135.5	138.2	140.9	141.2	140.8	143.7	145.2	142.2	139.3	139.5	133.1	157.2	157.2	
Lumber and timber basic products	156.5	158.2	154.8	149.1	145.4	142.3	140.9	140.8	142.4	140.4	138.6	139.0	133.5	127.3	
Sawmills and logging camps	171.0	167.5	160.3	155.7	152.1	150.2	150.7	152.9	151.0	149.4	150.7	144.8	139.0	139.0	
Planing and plywood mills	162.6	159.4	157.7	155.1	153.1	152.6	150.9	150.5	147.4	144.4	141.1	135.4	122.4	122.4	

See footnotes at end of table.

TABLE A-6: Indexes of Production-Worker Employment in Manufacturing Industries¹—Continued

[1939 average=100]

Industry group and industry	1947							1946							Annual average
	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	1943	
Durable goods—Continued															
Furniture and finished lumber products ²	127.8	129.8	129.5	131.8	134.2	134.5	131.8	129.6	127.7	125.2	123.5	123.4	119.6	111.7	
Mattresses and bedsprings	145.7	145.2	144.8	154.4	153.2	152.3	149.3	153.6	146.7	145.6	140.2	132.3	105.9		
Furniture	127.6	127.0	128.9	131.3	132.1	129.3	127.7	125.6	123.7	121.7	122.2	118.7	112.4		
Wooden boxes, other than cigar	127.7	128.3	128.9	126.6	124.1	123.8	121.1	120.7	118.8	117.6	118.0	114.5	125.0		
Caskets and other morticians' goods	138.1	138.8	140.6	144.3	143.0	142.8	141.0	134.7	124.7	124.9	123.7	123.5	102.4		
Wood preserving	148.0	144.7	144.6	142.1	143.3	140.4	134.0	131.6	131.9	130.5	127.2	98.7			
Wood, turned and shaped	122.6	124.0	136.2	137.5	140.0		133.0	129.9	124.9	123.1	122.4	123.0	117.3	107.4	
Stone, clay, and glass products ³	140.2	144.0	142.6	146.0	145.3	144.5	144.9	144.4	143.9	143.8	142.5	141.6	136.6	122.5	
Glass and glassware	168.6	171.1	172.2	170.8	167.8	171.9	171.5	172.2	174.0	172.4	171.4	165.7	139.9		
Glass products made from purchased glass	124.3	127.6	132.8	133.7	133.4	131.7	129.3	127.1	123.7	119.7	119.8	114.8	113.1		
Cement	144.4	121.3	145.5	143.3	143.6	143.9	144.6	142.6	141.9	143.1	143.4	138.8	111.5		
Brick, tile, and terra cotta	125.8	124.3	124.5	122.5	121.4	121.3	119.4	119.5	122.1	121.7	121.8	119.9	90.5		
Pottery and related products	164.1	165.6	166.0	166.1	166.2	163.6	162.5	160.0	158.6	158.2	155.6	150.5	132.9		
Gypsum	123.6	115.2	119.6	119.1	123.0	123.9	124.8	124.1	117.2	119.7	117.6	111.4	91.2		
Wallboard, plaster (except gypsum), and mineral wool	137.3	135.9	132.8	133.7	136.4	136.3	136.8	135.7	133.1	133.1	134.1	108.6	137.2		
Lime	98.6	99.3	97.6	95.3	95.3	94.2	93.6	95.2	94.7	94.1	93.7	93.1	98.7		
Marble, granite, slate, and other products	87.8	88.6	96.2	95.6	94.2	91.4	94.6	93.2	92.8	94.1	93.4	91.2	67.4		
Abrasives	242.2	250.4	253.7	260.0	260.3	262.0	260.0	259.0	256.2	249.7	246.5	243.4	302.2		
Asbestos products	132.7	131.3	132.5	134.5	135.0	136.2	136.4	136.0	134.1	129.0	126.3	121.3	138.2		
Nondurable goods															
Textile-mill products and other fiber manufactures	101.2	103.1	104.6	106.9	108.6	109.1	108.6	108.6	107.6	106.2	105.2	104.0	102.8	108.2	
Cotton manufactures, except smallwares	114.5	116.2	118.1	118.7	119.1	118.7	118.4	117.5	116.0	115.1	114.2	112.4	122.9		
Cotton smallwares	92.8	98.8	102.8	106.4	108.4	110.0	109.0	107.5	108.8	107.5	105.8	103.0	123.6		
Silk and rayon goods	75.8	76.7	78.4	79.5	79.6	79.9	79.8	79.1	78.3	77.6	77.2	75.9	79.9		
Woolen and worsted manufactures, except dyeing and finishing	98.3	99.2	102.8	105.9	108.6	109.2	110.2	108.7	107.5	107.0	104.4	103.9	111.9		
Hosiery	67.9	70.4	73.6	75.5	75.5	74.8	74.5	73.9	72.8	71.6	71.7	71.2	73.6		
Knitted cloth	83.5	85.4	89.9	94.4	95.3	95.7	99.6	102.9	102.3	102.2	102.4	101.2	107.7		
Knitted underwear and knitted gloves	86.2	91.3	97.5	104.4	107.0	108.0	112.7	112.0	109.6	108.0	105.8	106.8	115.0		
Knitted underwear	98.5	97.4	98.4	98.2	96.7	94.9	93.4	92.4	91.3	90.6	91.2	90.6	108.6		
Dyeing and finishing textiles, including woolen and worsted	95.7	96.7	97.8	99.2	99.3	98.7	97.2	96.9	95.9	95.9	95.4	94.2	101.6		
Carpets and rugs, wool	111.2	110.4	109.5	108.8	106.3	104.4	103.1	100.3	97.9	96.1	94.7	92.7	88.3		
Hats, fur-felt	76.9	75.3	70.7	81.7	82.2	82.5	81.7	80.6	79.1	78.0	61.8	73.7	68.9		
Jute goods, except felts	104.6	106.8	106.1	108.0	107.8	105.2	102.3	101.2	106.4	105.7	103.7	104.8	107.5		
Cordage and twine	113.9	116.4	119.8	121.6	123.7	124.0	127.2	125.8	127.2	125.5	122.8	118.8	139.3		
Apparel and other finished textile products ³	131.7	131.7	131.4	135.0	141.9	141.7	138.0	136.6	134.6	134.9	132.9	130.5	124.5	121.4	
Men's clothing, not elsewhere classified	123.9	122.2	123.5	125.2	125.3	123.9	123.1	121.8	117.7	116.1	115.7	112.2	115.8		
Shirts, collars, and nightwear	100.5	98.9	99.1	100.2	99.6	96.5	95.3	93.1	88.2	87.9	88.1	87.7	90.9		
Underwear and neckwear, men's	99.2	102.4	105.9	107.0	108.8	107.9	111.1	109.6	109.0	105.1	99.5	93.8	96.3		
Work shirts	99.6	104.8	111.0	116.9	118.7	115.6	112.8	108.7	106.4	107.8	104.9	106.2	131.3		
Women's clothing, not elsewhere classified	135.9	136.0	142.4	154.5	153.5	147.4	144.8	142.1	146.0	145.0	140.5	129.6	120.6		
Corsets and allied garments	93.1	93.8	93.9	93.1	90.5	89.7	90.1	88.2	86.8	84.6	83.8	82.2	88.1		
Millinery	78.9	78.9	86.4	102.6	101.9	95.0	88.2	79.2	95.1	96.6	92.7	82.9	91.5		
Handkerchiefs	90.3	93.1	94.8	96.4	95.2	91.6	91.1	87.1	86.6	82.9	82.1	78.0	113.1		
Curtains, draperies, and bedspreads	126.9	124.7	125.7	132.5	136.5	144.6	151.6	166.2	169.8	158.9	155.9	154.3	141.9		
Housefurnishings, other than curtains, etc.	256.2	262.0	259.4	257.0	257.0	260.2	265.4	262.6	269.3	264.0	262.1	248.9	214.9		
Textile bags	214.6	220.6	224.3	233.4	235.4	232.7	236.1	228.9	223.9	214.9	214.1	224.6	155.7		
Leather and leather products ³	100.6	99.8	99.4	103.0	104.7	104.9	104.4	104.2	102.9	102.2	103.1	102.7	103.0	91.8	
Leather	91.0	91.6	92.6	92.0	92.6	91.6	90.7	86.6	87.9	88.8	88.5	87.9	92.9		
Boot and shoe cut stock and findings	90.1	91.7	97.3	101.3	100.8	101.8	103.0	103.6	101.5	100.8	103.5	100.9	96.0		
Boots and shoes	92.9	92.1	95.6	97.2	97.1	96.4	96.0	94.7	93.7	95.0	94.1	95.0	89.0		
Leather gloves and mittens	120.9	120.3	123.2	126.8	128.3	130.8	137.1	139.5	140.0	139.2	140.4	141.7	153.7		
Trunks and suitcases	147.0	145.8	158.6	163.9	164.7	166.5	176.7	178.1	179.9	175.0	177.9	173.0	161.2		
Food	140.8	130.3	126.0	125.0	123.5	123.9	128.4	133.3	133.5	127.7	137.5	138.6	131.0	123.5	
Slaughtering and meat packing	121.1	118.9	115.7	119.1	123.5	128.1	125.0	115.3	70.0	78.6	114.8	102.4	136.6		
Butter	142.3	139.1	132.5	127.2	124.7	123.1	130.6	136.1	138.5	139.8	145.8	146.9	121.3		
Condensed and evaporated milk	162.1	154.5	148.2	140.4	137.9	134.6	132.5	135.4	140.7	146.6	154.9	162.1	134.2		
Ice cream	140.7	127.9	117.9	108.7	104.4	102.3	104.4	107.2	111.9	120.2	128.8	132.7	95.0		
Flour	119.0	116.1	121.3	122.5	122.5	123.2	123.9	124.8	123.5	119.9	118.9	114.3	115.2		
Feeds, prepared	146.1	139.3	142.3	144.8	140.4	142.1	137.6	141.5	140.7	136.2	145.7	140.6	141.0		
Cereal preparations	127.6	124.4	137.5	131.9	131.9	137.0	145.0	147.0	145.1	146.0	134.8	127.4	132.4		
Baking	107.2	106.5	107.2	106.2	105.7	107.9	109.6	107.9	104.6	104.6	102.7	101.4	110.1		
Sugar refining, cane	115.3	111.6	108.0	101.6	93.0	103.2	105.2	88.4	81.4	86.9	98.8	100.0	98.2		
Sugar, beet	55.8	50.8	44.0	43.0	48.2	88.0	154.8	211.1	187.0	76.9	65.6	43.6	80.3		
Confectionery	106.5	109.9	114.1	113.3	111.4	114.3	117.9	114.9	112.1	104.9	98.0	92.5	112.8		
Beverages, nonalcoholic	126.1	117.4	112.0	106.7	105.4	106.0	108.5	109.2	108.3	113.2	120.6	120.8	127.4		
Malt liquors	162.5	154.2	149.9	146.4	145.2	145.9	148.8	147.6	146.7	150.2	145.2	144.0	126.3		
Canning and preserving	67.9	59.4	59.4	56.9	60.8	70.3	86.2	98.1	128.9	182.2	153.5	136.8	99.5		
Tobacco manufactures	89.8	90.2	88.4	87.5	92.2	95.4	96.1	98.3	97.6	95.8	93.5	91.7	90.7	97.2	
Cigarettes	121.5	119.8	119.8	119.9	121.9	124.2	125.9	125.7	123.7	122.9	122.6	122.5	123.8		
Cigars	74.7	72.7	71.8	78.9	82.8	82.1	84.3	83.0	81.4	78.6	76.1	73.9	83.9		
Tobacco (chewing and smoking) and snuff	74.1	73.2	71.2	76.5	78.4	82.1	85.4	87.0	85.6	82.8	83.6	83.1	91.2		

See footnotes at end of table.

TABLE A-6: Indexes of Production-Worker Employment in Manufacturing Industries¹—Continued

[1939 average=100]

Industry group and industry	1947							1946							Annual average
	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	1943	
Nondurable goods—Continued															
Paper and allied products	140.7	143.6	143.7	145.0	145.9	145.9	145.6	145.7	144.3	141.7	140.0	139.2	137.4	122.2	
Paper and pulp		125.7	125.0	124.6	125.5	125.7	125.2	125.0	124.1	122.0	122.0	122.1	120.9	108.9	
Paper goods, other		125.1	125.2	126.1	126.7	126.9	126.2	127.4	127.6	125.5	123.8	122.7	120.8	127.1	
Envelopes		124.6	125.8	125.9	126.3	126.4	125.9	126.7	125.0	121.3	119.3	118.1	116.8	119.0	
Paper bags		130.8	134.3	139.5	140.8	142.6	144.7	142.4	139.1	136.4	132.3	129.3	127.5	112.0	
Paper boxes		123.4	125.1	129.7	131.3	131.4	132.0	133.9	132.7	129.5	126.3	126.1	123.8	120.5	
Printing, publishing, and allied industries ²	128.8	129.1	128.6	128.5	128.2	128.1	127.2	127.9	126.6	125.0	122.3	121.6	121.1	100.8	
Newspapers and periodicals		119.7	119.0	117.9	116.9	115.7	114.0	115.2	113.7	112.8	111.0	110.4	109.6	95.2	
Printing, book and job		137.8	137.2	138.1	138.4	139.4	139.5	139.5	138.3	136.6	133.2	132.1	132.6	108.7	
Lithographing		123.3	124.6	124.5	124.7	124.9	123.7	124.7	123.6	121.9	120.1	118.6	117.1	98.5	
Bookbinding		145.6	145.3	144.7	143.7	142.6	141.7	143.1	141.1	138.2	133.1	133.9	130.6	114.1	
Chemicals and allied products	189.8	187.9	194.8	196.2	197.5	197.1	195.6	192.5	190.9	187.2	184.0	180.5	178.9	254.5	
Paints, varnishes, and colors		131.6	132.9	132.7	132.4	130.6	129.0	129.2	127.7	127.9	127.8	127.6	126.6	104.8	
Drugs, medicines, and insecticides		190.9	194.4	196.7	198.2	196.9	197.9	196.4	195.4	193.8	190.0	188.7	187.5	166.1	
Perfumes and cosmetics		89.9	89.3	93.5	99.7	103.3	105.6	110.8	120.0	121.8	118.0	121.4	121.4	110.5	
Soap		115.1	112.2	112.4	113.2	111.2	107.1	105.5	101.3	100.8	104.5	103.8	103.2	98.0	
Rayon and allied products		103.6	121.3	120.8	121.0	122.3	122.0	121.3	121.9	119.8	118.8	118.7	118.0	107.9	
Chemicals, not elsewhere classified		182.1	180.3	180.1	179.1	178.6	178.6	176.7	173.3	169.8	167.6	168.5	168.4	167.7	
Explosives and safety fuses		190.9	191.8	192.1	191.0	188.3	184.9	177.4	174.6	178.2	176.9	173.1	169.8	124.8	
Compressed and liquefied gases		157.1	153.9	152.6	149.7	151.1	147.9	144.0	146.0	133.6	143.7	148.1	145.9	160.2	
Ammunition, small-arms		163.4	161.7	157.6	156.0	155.4	155.9	155.8	159.8	160.9	174.1	115.6	178.0	3614.0	
Fireworks		247.6	253.5	243.8	228.5	231.0	258.9	298.7	305.9	290.2	272.5	254.7	244.4	2434.9	
Cottonseed oil		65.2	72.3	85.3	99.0	108.3	114.1	124.4	134.7	115.3	85.6	71.0	55.6	116.7	
Fertilizers		114.4	136.3	146.2	153.4	148.8	136.6	122.8	117.7	117.1	118.7	111.5	102.7	120.9	
Products of petroleum and coal	153.7	150.8	149.3	145.4	145.9	146.0	145.4	146.1	146.6	146.8	147.8	147.4	146.7	117.6	
Petroleum refining		139.2	137.9	134.0	135.4	135.2	135.0	136.4	136.0	136.2	137.0	137.4	137.4	110.6	
Coke and byproducts		123.2	121.4	119.2	119.1	120.2	117.9	115.3	118.3	118.9	119.3	119.1	117.8	113.6	
Paving materials		73.8	77.1	76.3	72.5	68.2	67.4	67.6	72.5	82.6	95.5	91.7	86.7	64.3	
Roofing materials		157.9	155.3	152.7	150.5	152.9	154.4	155.8	157.2	157.1	156.6	151.0	149.4	119.2	
Rubber products	175.2	180.4	184.2	193.5	196.5	198.2	198.8	200.1	198.8	194.8	189.1	184.0	177.0	160.3	
Rubber tires and inner tubes		185.8	188.7	195.0	199.2	201.2	203.5	206.3	207.0	204.0	197.0	189.9	183.1	160.2	
Rubber boots and shoes		121.3	129.7	134.8	136.5	136.8	133.9	132.7	129.6	123.9	121.9	121.3	118.4	147.1	
Rubber goods, other		130.0	132.9	143.4	145.2	147.6	148.0	148.7	147.1	144.5	141.6	139.4	133.8	141.3	
Miscellaneous industries	170.2	174.4	176.3	179.8	182.1	180.9	179.3	183.2	182.0	180.2	176.9	175.1	170.5	181.7	
Instruments (professional and scientific) and fire-control equipment		178.1	175.6	180.3	181.0	181.8	182.0	184.3	175.9	186.4	188.8	191.3	191.6	644.3	
Photographic apparatus		151.3	149.2	147.6	147.2	146.4	146.5	146.8	146.8	146.8	146.7	148.3	145.9	168.9	
Optical instruments and ophthalmic goods		173.7	177.6	179.9	183.4	186.2	187.9	188.5	185.7	185.4	182.0	182.1	181.8	235.0	
Pianos, organs, and parts		139.8	139.1	139.7	142.1	139.2	136.5	124.7	129.9	127.0	124.0	122.9	118.9	131.3	
Games, toys, and dolls		130.9	127.5	127.4	123.7	117.5	114.2	129.9	134.9	130.4	126.3	122.1	111.3	83.8	
Buttons		74.7	78.2	82.8	85.8	87.5	91.7	95.5	93.0	96.4	96.3	96.3	92.2	98.1	
Fire extinguishers		206.7	203.6	210.7	225.0	227.3	214.7	219.6	213.3	208.2	212.3	209.1	202.1	767.9	

¹ See footnote 1, table A-5.² See footnote 2, table A-5.TABLE A-7: Indexes of Production-Worker Pay Rolls (Weekly) in Manufacturing Industries¹

[1939 average=100]

Industry group and industry	1947							1946							Annual average
	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	1943	
All manufacturing	313.9	319.4	312.2	310.7	314.1	310.6	307.3	306.2	298.2	292.8	290.3	284.4	267.1	334.4	
Durable goods	350.6	365.4	353.8	349.9	349.9	344.6	340.0	337.3	331.1	328.1	323.3	316.1	296.3	469.5	
Nondurable goods	277.9	274.4	271.6	272.3	279.2	277.4	275.3	275.8	266.0	258.3	258.1	253.4	238.5	202.3	
<i>Durable goods</i>															
Iron and steel and their products	304.4	315.0	306.7	297.5	294.2	287.9	287.9	276.2	280.8	273.7	273.6	265.9	247.5	311.4	
Blast furnaces, steel works, and rolling mills		247.0	236.2	219.8	212.8	209.3	208.9	193.9	208.7	203.2	206.3	204.0	191.8	222.3	
Gray-iron and semisteel castings		326.3	325.8	317.6	320.0	317.1	317.1	307.8	299.6	294.0	291.7	280.5	264.0	256.7	
Malleable-iron castings		329.2	324.7	313.4	310.0	307.5	302.8	283.8	294.4	292.5	287.5	282.6	267.1	273.4	
Steel castings		319.5	316.6	308.9	304.6	293.0	302.8	315.4	315.5	291.0	297.5	294.8	277.1	484.4	
Cast-iron pipe and fittings		310.7	309.7	281.7	287.5	282.1	286.7	259.9	262.4	253.5	239.9	208.6	221.7	174.2	
Tin cans and other tinware		263.7	250.4	248.5	243.3	238.7	242.8	244.5	232.6	248.8	274.1	270.1	248.7	161.6	
Wire drawn from purchased rods		220.7	219.3	247.6	237.1	241.1	247.7	239.6	240.7	231.3	231.8	219.2	206.3	255.3	
Wirework		270.3	255.5	270.5	279.8	254.9	273.8	261.7	261.7	265.1	270.9	256.5	237.2	202.6	
Cutlery and edge tools		350.0	370.4	388.2	408.0	407.0	405.1	404.7	389.9	368.9	364.6	354.9	340.4	279.5	

See footnotes at end of table.

TABLE A-7: Indexes of Production-Worker Pay Rolls (Weekly) in Manufacturing Industries¹—Continued

(1939 average=100)

Industry group and industry	1947							1946							Annual average
	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	1943	
Durable goods—Continued															
Iron and steel and their products—Continued															
Tools (except edge tools, machine tools, files, and saws)		347.7	340.0	361.4	362.8	355.6	361.3	360.8	348.8	355.8	340.8	326.2	303.6	334.1	
Hardware		304.8	306.3	301.2	300.2	298.6	291.9	286.2	281.5	278.3	266.6	257.3	244.9	245.8	
Plumbers' supplies		232.7	230.1	238.3	234.7	229.6	237.6	226.7	216.2	173.2	196.7	191.0	175.4	158.6	
Stoves, oil burners, and heating equipment not elsewhere classified		283.1	279.4	276.8	281.8	274.0	277.9	264.8	265.0	258.9	247.5	234.3	210.7	206.9	
Steam and hot-water heating apparatus and steam fittings		324.0	315.6	327.0	336.2	331.8	331.2	312.7	328.4	325.5	306.7	289.6	279.7	353.8	
Stamped and enameled ware and galvanizing		325.8	329.1	323.5	325.0	313.9	318.3	320.9	303.2	300.7	289.3	279.9	253.5	300.6	
Fabricated structural and ornamental metal-work		325.5	315.2	307.2	305.8	293.2	287.9	293.0	275.3	273.9	274.8	271.7	250.8	364.3	
Metal doors, sash, frames, molding, and trim		249.0	247.9	254.3	263.0	253.4	253.8	267.4	250.2	247.9	250.1	233.4	267.4	292.6	
Bolts, nuts, washers, and rivets		303.7	302.3	289.5	284.5	287.2	277.4	272.9	270.3	253.9	246.2	227.7	190.5	374.5	
Forgings, iron and steel		359.9	346.2	350.3	356.2	351.7	341.0	333.2	323.6	318.6	306.1	303.8	272.1	497.6	
Wrought pipe, welded and heavy-riveted		300.5	302.7	290.5	289.9	293.6	292.9	285.8	295.5	261.9	279.9	270.7	218.6	578.5	
Screw-machine products and wood screws		345.5	346.1	355.5	362.7	354.8	355.0	351.3	349.6	349.0	332.5	323.7	300.5	548.0	
Steel barrels, kegs, and drums		251.2	251.4	249.8	240.7	237.0	232.4	231.9	237.2	223.0	214.5	227.4	187.2	242.3	
Firearms		616.9	604.5	594.6	598.0	584.2	573.5	568.0	569.9	553.2	573.2	530.8	515.9	2881.7	
Electrical machinery	422.3	432.6	407.1	396.6	429.6	422.9	425.6	430.2	416.0	408.1	367.2	378.9	351.0	488.0	
Electrical equipment		343.8	327.8	317.0	322.3	315.2	317.2	317.0	308.3	303.7	297.7	283.3	264.3	444.7	
Radios and phonographs		390.1	413.0	409.1	419.7	415.7	423.2	447.7	427.3	408.5	390.0	366.8	332.1	472.3	
Communication equipment		445.0	349.3	350.0	524.3	528.1	530.3	535.8	521.3	521.5	504.9	483.4	459.2	503.1	
Machinery, except electrical	420.7	434.6	429.5	423.0	416.6	409.6	406.6	399.9	360.1	388.0	376.2	362.2	346.2	443.7	
Machinery and machine-shop products		367.9	362.6	357.6	354.9	352.0	350.3	346.7	336.8	333.5	322.3	314.2	299.4	430.9	
Engines and turbines		502.7	502.2	495.4	497.5	493.1	491.7	500.8	492.4	481.7	484.5	453.7	446.8	758.3	
Tractors		309.4	302.0	288.3	277.2	273.6	273.3	271.3	269.9	269.0	254.1	256.5	248.4	256.7	
Agricultural machinery, excluding tractors		371.9	344.3	333.2	312.5	308.3	294.9	291.1	280.7	277.2	269.8	252.9	247.5	256.0	
Machine tools		262.6	263.6	269.7	275.6	278.9	282.7	290.7	285.5	291.9	285.5	281.4	262.3	503.9	
Machine-tool accessories		305.4	311.6	320.4	326.7	332.5	342.7	351.0	343.4	343.3	336.0	316.3	293.2	577.8	
Textile machinery		367.1	363.7	351.8	353.2	347.3	337.3	321.7	301.1	298.3	290.5	277.9	265.3	230.1	
Pumps and pumping equipment		494.4	490.7	485.2	489.6	485.3	466.5	467.8	451.1	452.8	440.0	438.4	413.2	648.8	
Typewriters		233.5	309.1	295.4	287.7	282.6	276.2	270.1	279.0	261.6	248.1	228.2	216.5	143.8	
Cash registers, adding and calculating machines		394.2	417.3	415.5	401.1	388.5	355.7	347.2	352.0	336.0	331.8	292.8	314.2	341.6	
Washing machines, wringers and driers, domestic		404.2	392.7	377.5	355.6	323.5	326.8	306.2	291.7	301.2	287.9	269.5	234.6	301.5	
Sewing machines, domestic and industrial		319.4	300.8	296.0	296.0	287.6	278.1	273.0	260.5	255.0	243.1	238.9	229.6	282.3	
Refrigerators and refrigeration equipment		427.5	394.5	387.9	359.4	325.0	345.7	306.4	301.9	311.4	293.3	288.2	272.2	264.5	
Transportation equipment, except automobiles	479.6	560.3	561.3	565.3	556.9	558.2	562.6	571.2	531.1	542.3	524.1	553.1	558.7	3080.3	
Locomotives		774.7	757.0	705.4	723.7	827.2	797.2	876.0	836.8	895.6	846.8	826.8	836.0	1107.3	
Cars, electric- and steam-railroad		471.1	465.2	457.7	446.0	440.2	411.2	408.8	406.6	386.2	364.5	362.0	341.5	457.9	
Aircraft and parts, excluding aircraft engines		621.5	639.2	657.2	662.2	667.8	668.7	683.3	680.4	681.3	663.9	640.8	605.6	3406.3	
Aircraft engines		481.5	477.0	487.6	479.9	506.8	535.0	533.7	484.3	530.2	507.8	498.3	468.9	4528.7	
Shipbuilding and boatbuilding		396.4	395.6	399.1	386.0	377.9	395.8	399.1	336.8	353.7	346.6	421.5	468.8	3594.7	
Motorcycles, bicycles, and parts		381.8	363.1	349.0	349.5	327.6	318.5	346.7	318.4	317.5	290.9	272.1	239.8	253.6	
Automobiles	347.8	355.9	329.0	343.4	347.7	337.3	321.1	328.9	325.7	324.3	330.3	319.0	292.8	321.2	
Nonferrous metals and their products	326.6	346.2	349.0	354.0	359.0	360.0	354.8	356.3	345.3	323.8	331.8	324.2	303.9	354.5	
Smelting and refining, primary, of nonferrous metals		292.4	285.4	282.7	281.9	278.9	269.7	271.2	256.8	250.6	247.1	239.5	227.8	353.9	
Alloying and rolling and drawing of nonferrous metals except aluminum		279.7	283.4	294.6	299.4	307.0	301.4	301.9	290.0	286.6	284.7	283.0	268.7	353.4	
Clocks and watches		299.5	296.0	299.1	301.1	306.2	296.0	306.3	309.6	301.6	289.7	280.8	251.4	238.4	
Jewelry (precious metals) and jewelers' findings		212.4	215.4	220.2	232.8	233.9	236.8	250.5	231.0	235.5	237.3	221.1	201.6	165.1	
Silverware and plated ware		290.4	287.4	284.1	286.5	279.5	279.2	275.8	261.4	257.5	250.9	232.7	213.7	165.4	
Lighting equipment		289.4	295.5	283.6	288.9	297.5	285.7	272.5	271.2	264.6	260.6	252.5	239.2	207.2	
Aluminum manufactures		327.0	348.1	369.1	382.9	375.0	381.8	384.5	373.7	362.0	358.1	351.3	340.4	591.6	
Sheet-metal work, not elsewhere classified		282.0	278.7	274.6	273.4	275.3	277.4	281.9	278.0	280.8	261.7	269.0	246.1	277.7	
Lumber and timber basic products ¹	358.4	374.9	351.4	323.4	310.1	310.7	292.4	290.6	284.7	290.0	285.2	285.6	252.1	215.1	
Sawmills and logging camps		411.9	384.5	350.5	334.5	333.4	309.2	306.9	305.7	315.0	309.8	313.1	276.1	238.3	
Planing and plywood mills		366.5	350.5	333.9	323.3	318.9	311.5	308.6	291.3	294.8	280.8	274.1	242.0	197.8	
Furniture and finished lumber products ²	281.4	290.4	285.1	286.8	292.0	292.0	283.1	279.1	268.5	264.2	254.4	250.0	231.9	183.9	
Mattresses and bedsprings		291.6	282.0	281.7	303.6	306.8	308.4	306.9	305.8	297.2	280.8	262.7	241.7	165.7	
Furniture		284.7	278.9	282.2	288.8	289.1	278.8	273.4	263.7	260.1	249.9	246.7	228.0	185.3	
Wooden boxes, other than cigar		315.8	304.0	298.4	284.7	281.0	278.5	279.7	266.3	267.8	257.4	260.3	238.7	215.8	
Caskets and other morticians' goods		275.8	278.0	273.5	281.7	276.6	274.8	271.9	248.2	228.0	228.7	217.9	214.2	159.3	
Wood preserving		389.1	385.9	370.3	355.6	343.3	347.7	326.1	314.6	313.8	312.7	300.1	287.3	181.9	
Wood, turned and shaped		271.9	274.5	289.6	293.4	299.5	283.0	280.9	263.1	268.7	250.5	251.7	234.5	175.5	
Stone, clay, and glass products ³	294.6	296.2	286.9	288.8	285.7	278.4	280.0	281.6	274.8	271.3	267.0	260.1	242.2	189.1	
Glass and glassware		341.1	333.0	334.7	328.5	313.2	326.2	326.7	319.4	316.2	310.3	294.3	275.2	208.3	
Glass products made from purchased glass		259.5	259.4	262.5	264.6	269.3	267.4	264.4	252.6	239.6	222.9	227.4	205.5	165.9	
Cement		276.9	291.0	248.1	240.3	238.3	234.3	247.6	244.4	242.5	250.3	243.1	230.1	156.5	
Brick, tile, and terra cotta		278.9	276.4	257.0	253.0	247.2	247.1	245.3	242.2	248.5	244.3	239.7	229.7	135.8	
Pottery and related products		322.4	323.8	317.1	315.2	304.4	294.6	299.1	286.2	285.7	281.2	275.4	250.0	191.9	

See footnotes at end of table.

TABLE A-7: Indexes of Production-Worker Pay Rolls (Weekly) in Manufacturing Industries¹—Continued

[1939 average = 100]

Industry group and industry	1947							1946							Annual average 1943
	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	1943	
Durable goods—Continued															
Stone, clay, and glass products—Continued															
Gypsum		244.8	228.4	230.6	235.9	239.3	244.0	245.1	241.5	233.2	231.0	226.9	197.6	151.7	
Wallboard, plaster (except gypsum), and mineral wool		332.5	320.0	310.4	296.0	308.3	291.0	300.1	290.1	281.7	284.7	279.7	215.7	223.8	
Lime		237.8	232.5	231.5	223.1	217.6	210.2	219.7	221.4	218.3	219.9	216.5	201.0	171.6	
Marble, granite, slate, and other products		152.9	155.8	166.7	164.8	158.3	153.1	158.0	151.5	155.8	152.9	154.8	147.0	90.8	
Abrasives		413.8	440.6	442.6	462.4	450.9	482.9	459.9	440.8	407.8	400.0	406.2	404.5	480.2	
Asbestos products		314.2	299.8	301.4	308.2	307.6	305.6	300.0	293.4	287.5	273.7	270.0	253.4	254.6	
Nondurable goods															
Textile-mill products and other fiber manufactures															
Textile-mill products and other fiber manufactures	237.5	242.5	248.3	255.4	265.0	262.0	254.3	253.7	246.0	241.1	235.5	229.4	213.3	178.9	
Cotton manufactures, except smallwares		293.5	303.2	314.8	322.0	309.1	304.4	301.2	293.5	285.4	281.7	275.5	246.1	210.8	
Cotton smallwares		195.8	212.6	221.5	232.8	237.3	239.3	231.9	220.6	228.7	222.0	220.3	207.6	209.5	
Silk and rayon goods		194.3	200.4	200.9	208.8	206.9	201.3	197.9	191.4	189.3	180.9	181.4	160.3	134.5	
Woolen and worsted manufactures, except dyeing and finishing		240.2	240.5	248.3	262.0	275.0	251.8	253.0	242.7	243.7	242.7	234.1	228.6	202.2	
Hosiery		130.8	139.6	145.9	158.2	157.9	156.1	158.2	154.5	150.4	143.7	141.3	130.9	107.7	
Knitted cloth		176.5	180.4	188.7	205.5	207.1	198.5	207.1	217.4	217.1	216.1	213.1	209.0	172.3	
Knitted outerwear and knitted gloves		182.8	195.6	209.7	231.7	237.8	238.3	250.4	252.2	243.9	234.0	220.1	216.7	189.4	
Knitted underwear		232.4	232.1	228.3	230.9	223.0	215.5	216.1	207.9	203.9	199.4	196.1	189.7	180.2	
Dyeing and finishing textiles, including woolen and worsted		211.4	211.2	215.2	218.3	217.2	215.3	210.4	201.6	195.2	186.8	187.6	178.8	156.3	
Carpets and rugs, wool		236.3	231.3	226.5	222.4	214.5	210.6	214.3	204.0	196.2	182.5	173.0	165.2	141.2	
Hats, fur-felt		163.3	153.3	145.4	175.0	178.0	180.5	191.0	185.2	182.0	181.3	137.9	152.0	117.6	
Jute goods, except felts		244.7	256.0	247.2	255.4	255.9	240.1	236.4	228.6	239.4	237.4	225.8	217.2	190.9	
Cordage and twine		244.4	255.4	270.2	272.7	273.6	271.8	278.4	268.0	268.5	266.2	255.9	229.3	233.3	
Apparel and other finished textile products															
Apparel and other finished textile products	278.9	274.9	272.1	279.8	317.7	314.1	300.6	292.7	283.2	283.6	283.0	272.5	240.3	185.2	
Men's clothing, not elsewhere classified		273.0	270.5	267.1	281.3	280.8	277.2	278.4	271.9	246.2	242.7	236.4	215.3	174.9	
Shirts, collars, and nightwear		229.8	228.8	227.3	233.7	234.0	225.9	230.3	217.7	195.6	190.6	185.3	178.2	143.6	
Underwear and neckwear, men's		248.3	249.9	256.8	275.6	274.1	270.8	280.2	285.7	272.4	261.4	235.9	210.8	166.5	
Workshirts		228.7	242.3	257.7	274.3	283.9	273.7	280.2	262.0	236.7	235.1	227.9	219.0	220.4	
Women's clothing, not elsewhere classified		264.1	260.3	277.7	340.0	344.8	322.3	296.3	284.9	311.8	320.1	306.3	254.2	184.4	
Corsets and allied garments		199.8	198.6	197.8	196.6	191.2	183.5	186.6	182.8	177.1	166.2	161.2	154.4	137.1	
Millinery		128.3	118.9	137.7	197.2	201.9	169.6	140.4	117.2	168.3	179.7	166.2	144.9	123.3	
Handkerchiefs		205.9	221.7	212.2	228.0	221.4	201.4	220.4	204.5	193.8	178.7	178.5	157.6	184.0	
Curtains, draperies, and bedspreads		253.9	257.4	252.9	285.2	298.7	310.7	330.0	368.1	375.1	337.6	322.1	319.6	230.2	
Housefurnishings, other than curtains, etc.		553.4	560.8	530.1	515.8	518.2	522.0	545.6	543.1	512.6	555.2	536.5	492.3	370.3	
Textile bags		422.4	427.8	449.9	459.5	467.8	473.1	464.0	432.3	419.6	396.0	382.5	382.5	233.0	
Leather and leather products															
Leather and leather products	211.2	211.5	207.0	214.6	222.2	223.0	220.8	218.3	201.6	199.5	204.7	199.6	198.7	154.2	
Leather		185.2	183.7	183.7	185.2	185.8	179.4	174.5	160.1	158.4	159.6	160.8	156.2	140.6	
Boot and shoe cut stock and findings		172.9	170.0	179.2	190.5	189.1	192.0	191.8	183.5	182.4	182.4	194.0	179.9	142.2	
Boots and shoes		201.7	197.0	205.3	213.7	214.2	212.8	209.3	190.8	188.2	195.2	188.1	190.4	142.0	
Leather gloves and mittens		226.6	221.9	227.1	236.2	238.2	248.4	261.0	272.2	280.1	279.5	270.2	271.3	239.4	
Trunks and suitcases		298.1	281.6	312.7	320.9	327.6	321.3	353.1	348.3	353.2	333.6	333.0	303.6	240.3	
Food															
Food	290.8	267.8	252.8	243.1	239.3	242.5	256.4	263.3	252.0	232.2	246.5	254.3	235.1	180.9	
Slaughtering and meat packing		241.2	231.9	211.6	217.1	237.8	268.0	236.9	215.7	110.5	118.2	202.3	179.9	200.1	
Butter		293.1	274.3	257.2	243.3	237.3	233.7	246.6	243.4	256.1	258.7	265.0	267.6	169.6	
Condensed and evaporated milk		354.7	330.5	308.5	286.1	278.2	269.8	256.2	253.7	264.9	279.9	293.2	305.9	197.2	
Ice cream		250.2	221.3	203.8	188.9	182.8	181.6	185.5	183.2	194.9	204.0	215.7	221.7	124.0	
Flour		264.2	240.4	252.6	261.4	257.2	268.2	267.8	256.1	256.4	249.1	238.6	221.1	177.6	
Feeds, prepared		306.4	285.0	283.0	305.9	278.2	284.3	266.9	273.5	268.2	261.1	275.2	251.0	223.7	
Cereal preparations		253.9	242.7	260.1	258.7	253.9	260.5	271.9	271.6	274.7	269.6	244.4	219.5	217.4	
Baking		203.9	199.7	195.4	193.2	194.5	201.1	209.0	199.0	190.8	187.5	184.1	178.5	161.8	
Sugar refining, cane		250.7	206.2	216.0	188.3	161.2	167.3	200.2	150.4	125.5	138.3	162.5	167.5	142.9	
Sugar, beet		106.7	89.8	79.6	78.4	92.8	158.6	341.8	426.2	310.1	152.4	108.6	73.8	110.6	
Confectionery		226.4	229.1	230.9	231.5	227.4	226.3	240.5	226.9	212.1	204.4	186.6	169.7	166.4	
Beverages, nonalcoholic		210.9	190.3	178.9	165.7	163.4	164.6	169.1	163.7	161.6	170.6	185.0	186.1	153.9	
Malt liquors		296.4	268.3	251.8	239.7	233.6	235.7	251.5	236.9	235.4	244.2	232.3	222.3	170.1	
Canning and preserving		163.8	143.4	139.6	130.4	137.2	158.2	201.1	212.9	324.7	466.8	387.4	325.8	171.2	
Tobacco manufactures															
Tobacco manufactures	200.0	194.8	182.8	181.6	193.1	201.0	209.4	222.0	212.7	207.4	196.0	186.2	178.3	151.0	
Cigarettes		239.6	220.9	218.4	226.8	233.6	241.5	254.7	247.1	238.9	226.7	218.7	211.1	172.0	
Cigars		168.0	163.9	160.3	176.3	186.2	195.2	206.7	194.3	191.7	180.9	167.4	160.1	139.7	
Tobacco (chewing and smoking) and snuff		147.7	125.7	139.4	144.4	144.0	155.8	166.8	166.7	160.0	150.7	149.3	140.5	131.1	
Paper and allied products															
Paper and allied products	298.7	299.6	292.6	290.9	290.9	288.1	285.1	284.5	276.6	268.5	259.8	256.5	246.4	184.8	
Paper and pulp		270.0	259.0	254.8	252.5	251.4	246.9	244.9	240.3	234.9	228.0	227.8	218.4	169.9	
Paper goods, other		244.9	250.1	247.6	249.3	246.2	246.4	249.0	240.9	233.5	225.8	216.4	211.8	184.1	
Envelopes		241.9	240.2	238.8	238.8	237.3	234.9	235.4	229.3	212.9	207.9	205.5	198.4	168.6	
Paper bags		271.9	270.4	274.9	283.8	283.9	292.2	283.5	268.6	264.8	252.6	233.9	237.7	174.0	
Paper boxes		250.3	249.9	256.9	261.3	256.8	257.9	262.1	254.6	245.0	235.8	234.1	222.6	176.8	
Printing, publishing, and allied industries															
Printing, publishing, and allied industries	233.6	235.9	234.2	230.7	227.7	221.8	219.6	223.9	214.0	208.4	203.1	198.1	193.3	124.7	
Newspapers and periodicals		210.0	209.3	202.1	197.2	191.2	185.2	189.7	182.0	178.9	175.6	168.8	163.7	111.7	
Printing, book and job		258.1	255.4	255.2	253.5	248.4	249.4	253.7	241.4	233.4	227.9	222.4	220.2	137.3	
Lithographing		216.6	216.1	219.9	219.1	212.6	214.7	216.3	208.3	202.7	195.9	193.2	183.1	124.9	
Bookbinding		324.7	320.2	312.5	309.0	298.7	301.0	306.9	291.0	283.0	266.2	269.8	259.9	174.8	

TABLE A-7: Indexes of Production-Worker Pay Rolls (Weekly) in Manufacturing Industries¹—Continued

[1939 average=100]

Industry group and industry	1947							1946							Annual average
	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	1943	
Nondurable goods—Continued															
Chemicals and allied products.....	378.7	373.3	381.5	378.3	377.5	372.6	362.9	357.0	345.0	335.3	329.1	320.0	315.5	422.5	
Paints, varnishes, and colors.....		233.9	234.1	231.7	230.6	222.0	216.4	214.7	208.2	204.8	201.7	204.2	199.5	152.9	
Drugs, medicines, and insecticides.....		354.6	358.7	359.8	362.9	362.7	352.8	351.3	341.9	331.9	316.8	313.7	307.0	233.4	
Perfumes and cosmetics.....		168.9	166.1	171.3	185.0	188.3	190.3	203.2	215.5	212.7	195.2	191.8	191.4	147.0	
Soap.....		229.5	217.2	215.9	214.8	208.3	199.2	195.7	170.8	169.0	173.2	171.7	170.2	146.1	
Rayon and allied products.....		205.3	239.0	239.2	236.4	236.0	219.7	216.3	215.2	209.8	210.8	206.2	197.6	162.5	
Chemicals, not elsewhere classified.....		338.9	334.9	329.5	326.8	323.5	321.0	313.4	301.3	294.0	289.6	288.0	289.2	273.5	
Explosives and safety fuses.....		341.1	332.8	310.6	315.3	307.9	320.3	299.2	282.7	292.4	292.9	272.6	264.5	1918.5	
Compressed and liquefied gases.....		285.0	268.4	265.9	253.9	258.4	248.1	247.4	242.5	220.0	240.8	247.2	238.8	264.3	
Ammunition, small-arms.....		358.9	351.7	336.4	333.2	334.1	332.3	326.7	332.3	326.2	339.3	201.4	335.7	6769.3	
Fireworks.....		685.3	686.6	715.6	628.4	623.7	661.1	788.6	824.6	778.4	698.3	623.1	622.1	5981.9	
Cottonseed oil.....		169.0	184.7	208.8	253.9	280.7	295.0	326.8	341.3	277.7	196.5	158.8	119.8	201.5	
Fertilizers.....		301.8	305.0	381.0	385.0	360.6	327.6	304.9	276.6	280.4	297.4	275.4	246.4	225.0	
Products of petroleum and coal.....	295.6	286.2	275.7	265.2	262.1	256.8	253.9	250.9	252.6	252.7	257.3	253.1	251.0	184.3	
Petroleum refining.....		253.8	243.8	236.8	234.9	228.8	227.5	230.2	226.9	228.2	232.7	228.7	228.0	172.3	
Coke and byproducts.....		256.2	248.0	230.6	229.3	230.5	222.6	196.7	216.2	215.8	220.0	218.2	215.1	177.4	
Paving materials.....		159.0	147.6	144.2	121.4	114.5	116.1	129.6	135.0	150.5	190.6	186.1	171.4	107.0	
Roofing materials.....		339.5	336.3	323.4	312.8	314.0	313.5	309.8	313.8	303.5	298.6	292.0	279.5	197.2	
Rubber products.....	352.7	363.4	371.2	383.9	374.3	385.0	386.3	392.2	377.4	361.3	363.9	336.9	321.4	263.9	
Rubber tires and inner tubes.....		341.3	349.0	357.2	343.2	357.7	361.2	368.9	360.3	346.1	348.9	311.2	304.3	256.3	
Rubber boots and shoes.....		269.5	282.0	283.7	274.3	280.6	276.0	272.6	253.7	214.8	245.8	240.2	226.6	246.4	
Rubber goods, other.....		271.5	276.6	296.6	297.3	302.8	303.4	308.6	292.4	288.5	282.4	277.7	255.9	234.5	
Miscellaneous industries.....	341.5	355.4	356.6	361.0	367.6	360.0	356.7	363.3	354.0	350.7	339.3	329.3	314.2	322.7	
Instruments (professional and scientific), and fire-control equipment.....		337.2	317.0	327.5	327.6	326.4	329.5	334.6	310.7	331.5	330.7	330.4	327.0	1140.5	
Photographic apparatus.....		280.7	275.2	271.4	271.6	249.5	254.1	253.1	253.4	246.6	239.1	244.6	240.0	261.8	
Optical instruments and ophthalmic goods.....		331.2	331.2	324.2	334.5	334.3	344.8	346.3	337.1	332.8	322.1	316.5	314.9	368.2	
Pianos, organs, and parts.....		298.3	300.2	293.8	298.6	302.6	297.7	242.2	270.2	250.5	241.1	230.8	213.7	247.9	
Games, toys, and dolls.....		281.1	277.6	275.0	269.7	246.7	236.4	285.6	298.6	280.1	260.4	252.1	222.1	142.8	
Buttons.....		162.4	167.7	178.4	189.2	196.9	203.0	215.7	211.3	211.0	214.1	208.6	195.2	171.6	
Fire extinguishers.....		420.0	396.9	380.5	410.0	409.7	425.9	438.8	431.9	415.8	414.7	405.8	397.1	1365.1	

¹ See footnote 1 table A-5.² See footnote 2 table A-5.

* Revised.

TABLE A-8: Estimated Number of Employees in Selected Nonmanufacturing Industries¹

[In thousands]

Industry group and industry	1947							1946							Annual average	
	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	1943	1939
Mining: ²																
Anthracite.....	65.2	66.5	67.1	66.4	67.7	68.7	69.1	68.7	68.7	68.9	68.1	67.9	67.5	65.5	71.2	82.8
Bituminous coal.....	303	329	326	308	332	335	336	326	334	334	335	337	332	332	386	371
Metal: ³	78.6	80.0	78.9	79.0	78.2	77.3	76.9	76.0	75.2	74.1	73.7	72.8	68.8	65.6	96.4	88.2
Iron.....		29.6	29.0	28.4	28.4	27.3	26.4	26.6	27.5	27.8	27.7	28.1	27.4	26.8	32.2	20.1
Copper.....		24.5	23.9	24.2	24.2	24.2	23.9	23.3	22.5	21.8	21.5	21.2	20.4	14.7	31.4	23.8
Lead and zinc.....		16.0	16.0	16.2	16.5	16.6	16.5	16.1	15.5	15.0	14.9	13.8	11.5	14.7	19.0	15.5
Gold and silver.....		7.6	7.8	7.9	8.0	7.9	7.7	7.6	7.3	7.2	7.2	7.2	7.0	7.1	7.3	24.8
Miscellaneous.....		2.3	2.2	2.3	2.3	2.2	2.2	2.4	2.4	2.3	2.4	2.5	2.5	2.3	6.6	4.0
Transportation and public utilities:																
Class I steam railways ⁴	138.3	1376	1365	1345	1325	1324	1332	1353	1382	1376	1363	1371	1350	1330	1355	988
Street railways and busses ⁵	254	253	253	254	254	254	254	252	253	252	252	252	250	249	227	194
Telephone.....	614	605	606	604	599	594	588	586	583	577	575	575	565	545	402	318
Telegraph ⁶	38.2	38.5	38.7	39.3	37.9	38.3	39.4	40.4	40.9	41.5	42.2	42.1	42.3	42.2	46.9	37.6
Electric light and power.....	267	263	258	256	254	252	250	252	250	249	249	249	247	244	211	244
Service:																
Hotels (year-round).....	382	385	382	379	378	380	378	384	388	389	385	385	384	387	344	323
Power laundries ⁷	(9)	(9)	(9)	(9)	(9)	(9)	(9)	(9)	(9)	(9)	(9)	(9)	(9)	(9)	260	226
Cleaning and dyeing ⁸	(9)	(9)	(9)	(9)	(9)	(9)	(9)	(9)	(9)	(9)	(9)	(9)	(9)	(9)	80.7	67.5

¹ Includes all employees unless otherwise noted. Data for the two most recent months are subject to revision without notation. Revised data for earlier months are identified by an asterisk.² Includes production and related workers only.³ Includes all employees at middle of month. Excludes employees of switching and terminal companies. Class I steam railways include those with over \$1,000,000 annual revenue. Source: Interstate Commerce Commission.⁴ Includes private and municipal street railway companies and affiliated, subsidiary, or successor trolley-bus and motor-bus companies.⁵ Includes all land line employees except those compensated on a commission basis. Excludes general and divisional headquarters personnel, trainees in school, and messengers.⁶ The change in definition from "wage earner" to "production worker" in the power laundries and cleaning and dyeing industries results in the omission of driver-salesmen. This causes a significant difference in the data. New series are being prepared.

TABLE A-9: Indexes of Employment in Selected Nonmanufacturing Industries¹

[1939 average = 100]

Industry group and industry	1947							1946							Annual average 1943
	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	
Mining:															
Anthracite.....	78.7	80.3	81.1	80.1	81.8	82.9	83.4	83.0	82.9	83.2	82.2	82.0	81.4	79.0	86.0
Bituminous coal.....	81.8	88.7	88.1	83.0	89.7	90.4	90.8	88.1	90.0	90.1	90.5	90.8	89.5	89.6	104.1
Metal.....	89.1	90.7	89.4	89.6	88.6	87.6	87.2	86.2	85.2	83.9	83.5	82.5	78.0	74.4	109.3
Iron.....	147.2	143.8	141.3	135.5	131.5	131.4	132.4	132.4	136.1	138.7	138.1	139.3	135.6	132.8	160.2
Copper.....	102.8	100.2	101.5	101.6	101.5	100.4	100.4	97.8	94.6	91.2	90.0	88.8	85.6	61.8	131.8
Lead and zinc.....	102.9	102.9	104.4	106.1	106.9	106.4	103.4	103.4	99.4	96.3	95.6	89.0	74.2	94.7	122.1
Gold and silver.....	30.6	31.4	31.9	32.2	31.7	31.3	30.7	29.6	28.9	29.0	29.1	28.5	28.8	29.4	29.4
Miscellaneous.....	58.0	56.5	57.0	56.9	55.2	54.7	59.6	60.9	59.2	60.4	63.7	62.5	58.4	164.9	164.9
Quarrying and nonmetallic.....	105.7	104.3	103.1	98.7	97.1	96.9	99.7	101.2	101.7	102.5	103.2	101.2	98.9	96.2	96.2
Crude petroleum production ²	95.5	93.3	92.6	92.0	91.7	92.1	92.6	93.0	93.4	93.9	95.5	95.4	94.2	81.8	81.8
Transportation and public utilities:															
Class I steam railways ³	140.0	139.3	138.2	136.1	134.2	134.0	134.9	136.9	139.9	139.3	138.0	138.8	136.6	134.7	137.2
Street railways and busses ⁴	130.9	130.4	130.7	130.9	131.0	131.1	130.9	130.1	130.6	130.3	129.9	130.2	128.9	128.7	117.0
Telephone.....	193.3	190.4	159.2	127.2	188.4	186.9	185.2	184.6	183.4	181.6	181.0	181.1	177.7	171.7	126.7
Telegraph ⁵	101.5	102.3	102.8	104.5	100.7	101.8	104.6	107.4	108.7	110.3	112.0	111.9	112.4	112.1	124.7
Electric light and power.....	109.3	107.5	105.7	104.8	104.0	103.2	102.5	103.0	102.5	102.0	101.9	101.9	101.2	99.9	86.3
Trade: ⁶															
Wholesale.....	111.1	110.5	109.7	110.5	111.7	111.9	112.2	114.4	112.7	110.7	109.4	109.1	107.5	106.9	95.9
Retail.....	110.2	111.4	111.3	111.5	111.2	109.6	110.5	126.5	117.4	112.2	109.8	106.6	106.2	107.2	99.9
Food.....	113.7	113.9	113.7	112.8	111.2	108.5	111.9	108.6	103.7	103.5	103.6	101.3	103.5	106.2	106.2
General merchandise.....	120.5	121.2	122.9	122.5	119.5	125.6	171.0	145.2	132.4	125.4	117.4	117.7	121.0	116.9	116.9
Apparel.....	114.9	114.3	114.7	113.4	107.9	110.0	135.5	124.1	120.1	116.7	105.9	107.9	114.3	110.1	110.1
Furniture and housefurnishings.....	85.1	84.6	84.6	84.4	84.3	84.3	90.4	85.5	83.1	81.5	79.5	78.1	77.6	67.7	67.7
Automotive.....	100.6	99.4	98.7	97.8	98.2	98.3	100.2	98.4	96.6	95.5	94.4	93.4	91.3	63.0	63.0
Lumber and building materials.....	119.5	117.6	116.3	115.5	113.9	113.4	116.1	115.1	113.6	113.8	112.6	111.1	109.4	91.5	91.5
Service:															
Hotels (year-round) ⁷	118.3	119.4	118.4	117.5	117.3	117.7	117.3	119.1	120.2	120.6	119.5	119.3	119.1	119.9	106.6
Power laundries.....	112.8	112.2	110.2	109.1	108.7	109.5	111.0	110.9	109.9	110.1	109.9	111.6	113.6	112.3	115.3
Cleaning and dyeing.....	123.4	127.7	123.7	121.5	118.8	117.0	118.2	120.9	123.0	126.1	125.6	124.5	130.0	131.6	119.6

¹ See footnote 1, table A-8.² Does not include well drilling or rig building.³ See footnote 3, table A-8.⁴ See footnote 4, table A-8.⁵ See footnote 5, table A-8.⁶ Includes nonsupervisory workers and working supervisors only.TABLE A-10: Indexes of Pay Rolls (Weekly) in Selected Nonmanufacturing Industries¹

[1939 average = 100]

Industry group and industry	1947							1946							Annual average 1943
	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	
Mining:															
Anthracite.....	171.8	194.6	186.3	155.5	206.2	184.7	202.0	212.3	182.3	199.9	194.0	193.3	186.5	182.7	133.9
Bituminous coal.....	194.9	252.3	244.6	189.8	245.6	248.7	265.4	258.3	233.1	237.1	234.9	241.0	198.4	243.8	187.7
Metal.....	171.9	181.5	172.1	164.7	162.6	162.0	156.8	159.3	146.9	148.0	147.0	145.2	132.4	126.9	166.9
Iron.....	309.4	284.7	254.1	246.7	240.3	229.4	239.7	238.6	252.4	253.3	253.5	247.1	239.5	247.0	247.0
Copper.....	213.0	201.8	197.3	196.8	198.0	193.6	192.2	170.0	167.1	163.1	164.1	153.8	106.8	212.8	212.8
Lead and zinc.....	228.1	223.3	224.7	222.2	226.2	221.7	220.1	192.1	188.5	188.0	172.1	128.5	180.5	209.0	209.0
Gold and silver.....	49.5	49.3	50.5	50.7	51.0	48.3	49.8	44.5	43.0	42.5	43.5	38.5	41.6	36.9	36.9
Miscellaneous.....	100.3	95.8	92.1	92.1	85.3	85.5	93.3	99.9	99.9	98.0	103.5	96.7	95.5	259.8	259.8
Quarrying and nonmetallic.....	251.3	241.7	233.2	213.7	205.6	204.8	221.9	222.4	227.6	227.9	225.1	213.6	207.7	162.2	162.2
Crude petroleum production ²	175.3	163.4	162.3	154.5	152.9	153.8	147.1	151.0	150.1	149.5	152.6	151.3	147.1	115.9	115.9
Transportation and public utilities:															
Class I steam railways.....	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)
Street railways and busses ⁴	222.1	220.0	218.8	218.6	219.5	216.1	213.6	210.9	212.6	207.9	211.2	206.7	199.5	155.7	155.7
Telephone.....	292.5	292.9	136.1	267.2	269.4	267.5	264.5	273.0	269.2	265.0	267.6	268.8	259.9	144.9	144.9
Telegraph ⁵	218.8	226.9	239.3	198.0	201.5	189.1	190.5	194.2	201.7	177.3	178.5	178.6	174.9	159.3	159.3
Electric light and power.....	177.5	168.2	166.5	160.8	163.7	159.5	161.6	157.6	155.3	153.3	152.4	150.2	148.4	109.2	109.2
Trade: ⁶															
Wholesale.....	196.5	198.0	191.4	190.8	191.6	190.4	189.7	197.2	189.7	184.5	182.8	177.3	174.5	172.6	127.0
Retail.....	198.6	201.2	195.1	192.9	190.1	187.5	187.2	212.2	191.7	182.5	180.8	174.6	172.6	171.3	120.6
Food.....	212.1	206.0	202.8	199.9	197.1	189.4	194.6	185.7	174.6	173.6	177.2	171.5	170.0	129.2	129.2
General merchandise.....	217.4	212.3	210.4	205.6	201.4	208.4	277.2	225.0	204.8	199.0	188.1	187.1	188.8	135.9	135.9
Apparel.....	207.2	200.8	200.7	194.6	184.1	188.2	230.2	207.6	201.5	197.8	176.2	177.5	186.9	133.9	133.9
Furniture and housefurnishings.....	156.6	151.1	148.1	146.6	143.8	144.1	165.7	148.6	139.8	139.1	129.7	129.6	126.6	86.5	86.5
Automotive.....	184.3	177.7	175.2	171.7	172.7	170.4	178.8	169.3	166.0	164.8	160.1	156.8	152.9	84.7	84.7
Lumber and building materials.....	219.7	210.2	204.0	201.3	197.7	193.4	200.5	191.9	190.9	190.0	186.1	180.1	177.2	120.7	120.7
Service:															
Hotels (year-round) ⁷	222.0	226.4	221.1	219.4	216.8	216.6	215.1	218.8	218.5	214.5	209.5	208.9	204.9	205.0	138.7
Power laundries.....	210.3	211.1	203.8	200.5	196.9	196.1	201.8	201.0	191.5	189.8	188.7	188.4	193.3	190.9	149.5
Cleaning and dyeing.....	227.6	241.9	231.5	221.7	214.7	204.7	213.8	219.5	217.0	225.7	225.6	216.9	231.3	236.6	165.2

¹ See footnote 1, table A-8.² See footnote 2, table A-9.³ Not available.⁴ See footnote 4, table A-8.⁵ See footnote 5, table A-8.⁶ See footnote 6, table A-9.⁷ Money payments only: additional value of board, room, uniforms, and tips, not included.

TABLE A-11: Estimated Number of Employees on Contract Construction, by State ¹

State	Employment (in thousands)														
	1947						1946							1945	1943
	June	May	April	March	February	January	December	November	October	September	August	July	June	June	Average
Alabama.....	20.2	19.0	17.1	18.3	18.2	17.6	19.5	20.6	21.1	21.9	21.6	20.3	19.4	15.4	25.4
Arizona.....	9.6	9.6	9.5	9.0	9.2	9.0	8.7	8.5	8.9	9.1	8.5	8.0	7.3	6.2	14.0
Arkansas.....	17.8	17.0	15.0	14.2	14.6	14.5	15.2	15.5	16.6	16.6	17.4	16.3	12.7	20.7	18.9
California ²	14.7	13.3	12.6	12.2	12.8	12.9	12.5	12.2	12.7	13.5	13.4	11.9	11.1	10.4	10.8
Colorado.....	28.8	27.7	26.6	25.4	23.6	24.8	27.5	28.2	28.2	27.4	27.0	26.2	25.1	13.9	17.6
Connecticut ³	6.6	6.4	6.3	6.0	5.7	5.7	6.5	6.9	7.0	7.2	7.3	6.9	6.6	3.3	5.5
Delaware.....	18.1	18.2	16.2	15.7	15.8	15.0	15.9	17.3	17.9	17.5	17.4	16.7	15.8	12.6	17.1
District of Columbia.....	31.4	37.4	37.3	36.5	38.4	40.9	41.9	41.4	41.2	40.1	38.8	36.1	34.3	24.3	42.5
Florida.....	28.8	27.4	25.1	24.7	24.2	22.7	23.6	25.2	25.8	26.3	27.1	25.2	24.5	16.4	34.0
Georgia.....	7.5	7.1	5.7	5.3	5.0	4.6	5.8	6.5	6.3	6.5	7.2	6.9	6.8	3.6	5.0
Idaho.....	115.6	114.1	107.8	100.4	96.1	92.9	97.9	100.8	102.4	98.8	96.1	92.0	88.9	42.8	81.2
Illinois.....	40.4	38.5	37.9	35.1	34.3	32.8	36.0	36.6	39.7	38.5	38.7	37.9	35.0	33.0	36.6
Indiana.....	24.8	22.6	22.0	21.3	21.6	21.4	23.4	24.4	25.4	26.3	25.0	23.1	21.6	14.2	13.7
Iowa.....	19.7	19.4	17.6	14.7	14.8	15.1	17.2	18.2	19.1	19.4	18.9	17.1	15.6	12.8	34.8
Kansas.....	16.2	15.4	14.8	14.3	14.2	14.1	15.8	16.8	17.4	16.7	16.5	15.8	15.1	10.3	19.0
Kentucky.....	26.9	25.9	24.7	24.9	23.4	24.4	26.3	26.8	28.3	32.1	31.7	29.7	25.4	19.1	49.4
Louisiana.....	9.8	10.0	7.9	6.8	6.5	6.9	8.3	9.4	9.5	9.6	9.4	8.6	7.7	4.5	10.1
Maine.....	45.2	43.6	41.2	39.2	35.9	36.3	39.1	40.1	40.0	40.0	38.9	38.0	36.6	23.7	44.0
Maryland.....	64.5	59.4	54.0	52.5	50.8	52.2	58.0	62.1	64.3	62.5	61.9	60.4	54.3	35.7	36.3
Massachusetts ⁴	55.6	48.6	58.2	57.2	54.6	59.7	62.6	64.0	67.6	68.7	67.1	63.5	61.5	35.4	47.4
Michigan.....	31.0	29.0	26.6	25.4	24.6	29.3	30.4	32.3	33.6	33.7	34.6	34.3	32.8	17.8	18.1
Minnesota.....	13.0	12.1	11.9	13.4	13.6	13.1	14.0	14.6	15.3	14.6	14.0	12.8	10.9	8.0	15.7
Mississippi.....	39.2	35.6	38.6	41.5	41.8	42.4	45.0	45.7	46.2	43.5	41.9	40.7	35.5	24.1	28.4
Missouri.....	6.7	6.6	5.6	4.9	5.1	4.8	5.2	6.3	6.8	6.9	7.0	6.3	5.9	3.9	3.3
Montana.....	13.5	12.8	10.9	8.7	8.5	11.0	12.3	12.9	13.7	14.5	15.2	14.6	14.1	7.4	14.7
Nebraska.....	4.1	3.9	4.4	4.4	4.6	5.0	5.5	5.7	6.2	6.4	6.6	6.5	6.1	4.2	7.5
Nevada.....	6.1	6.3	5.5	5.1	5.2	5.5	6.9	7.2	7.4	7.1	6.9	6.7	6.5	3.0	3.0
New Hampshire.....	62.9	57.1	59.4	57.8	56.7	55.9	60.9	61.4	63.3	61.5	60.5	59.6	58.6	34.8	47.5
New Jersey.....	177.5	172.5	164.4	157.4	157.7	167.3	180.8	187.6	191.7	184.1	177.2	166.3	152.3	106.4	123.8
New Mexico ⁵	40.1	39.1	37.3	38.6	36.9	37.9	39.6	39.9	40.1	40.0	39.1	37.0	35.1	15.7	35.8
New York.....	4.0	3.8	3.0	2.9	3.1	2.6	3.0	4.0	3.7	3.7	3.7	3.3	3.1	2.2	1.4
North Carolina.....	103.2	99.1	95.2	88.8	87.9	90.6	96.2	100.9	104.4	102.1	100.1	96.7	91.3	53.8	70.3
North Dakota.....	24.9	22.7	20.5	19.9	19.2	18.1	19.3	19.1	19.7	19.9	19.6	17.8	16.0	8.6	30.4
Ohio ⁶	21.9	20.7	19.8	19.4	19.1	19.6	20.3	22.7	22.8	23.2	22.9	20.4	18.7	12.7	17.9
Oklahoma.....	134.2	130.6	125.7	115.6	113.8	115.8	125.1	128.4	133.9	128.7	125.5	122.1	115.0	78.3	95.8
Oregon.....	9.9	9.6	9.4	8.2	8.0	8.2	9.2	9.1	8.5	8.0	7.7	7.5	7.4	8.2	16.2
Pennsylvania.....	18.0	17.2	17.4	17.0	16.7	16.9	17.1	17.8	18.4	19.9	19.0	18.4	16.2	7.9	16.5
Rhode Island.....	4.1	3.7	2.9	2.7	2.8	2.8	3.1	3.6	4.1	4.7	4.0	3.5	3.2	2.0	2.8
South Carolina.....	97.9	94.5	91.6	83.4	81.1	78.0	79.8	81.2	80.7	83.7	81.0	79.6	75.9	61.0	122.6
South Dakota.....	9.7	10.3	9.1	8.1	7.5	7.1	7.6	8.3	8.6	9.0	8.6	8.4	8.1	5.3	22.2
Tennessee ⁷	4.0	3.4	2.7	2.3	2.4	2.4	2.5	2.9	3.0	2.7	2.8	2.7	2.6	1.3	1.3
Texas.....	38.6	38.6	36.3	32.8	32.7	33.9	37.6	38.9	38.9	41.5	39.3	37.4	34.2	27.8	54.7
Utah.....	32.6	31.3	29.6	27.2	25.5	23.3	27.4	31.0	33.2	33.5	34.0	33.9	33.3	26.1	45.0
Vermont.....	12.9	11.5	11.1	10.9	11.1	11.5	11.7	11.8	12.3	11.8	11.0	10.7	10.4	9.0	14.7
Virginia.....	38.9	36.5	34.0	33.4	33.0	37.5	39.6	40.8	40.7	41.2	39.6	38.7	36.1	26.2	21.4
Washington.....	5.8	5.4	5.4	4.5	4.6	3.5	4.6	4.9	5.1	5.4	5.5	4.9	4.3	2.7	3.9
West Virginia.....															
Wisconsin.....															
Wyoming.....															

¹ Covers all employees of firms whose major activity is construction. The estimates include all off-site employees of these firms (regardless of whether or not they are engaged in work relevant to construction activities) as well as their employees at the site of construction projects. The data do not cover any self-employed persons, working proprietors, or employees of nonconstruction organizations (including force-account workers of public bodies and private firms) who may be engaged in construction activities.

² At date of publication, estimates for this State had not been completed.

³ Revised.

Source: These estimates were compiled by the U. S. Bureau of Labor Statistics in connection with its State employment statistics program and as a segment of the Bureau's nonagricultural employment series. The estimates were derived from base data developed for a recent selected month from State Unemployment Compensation and Bureau of Old Age and Survivors Insurance data, and adjusted monthly on the basis of current reports of employment made directly to the Bureau of Labor Statistics by a sample of contractors.

TABLE A-12: Total Federal Employment by Branch and Agency ¹

Year and month	All branches	Executive ²				Legislative	Judicial	Government corporations ³
		Total	Defense agencies ⁴	Post Office Department ⁵	All other agencies			
	All areas (including outside continental United States)							
1939.....	968,572	935,469	207,978	319,474	408,017	5,373	2,290	25,470
1943.....	3,244,924	3,200,527	2,366,251	364,092	470,184	6,171	2,636	35,690
1946: July.....	2,689,901	2,646,708	1,547,896	420,709	678,103	6,697	3,063	33,433
August.....	2,625,051	2,581,932	1,470,579	424,321	687,032	6,736	3,036	33,347
September.....	2,517,827	2,474,982	1,358,426	424,734	691,822	6,825	3,075	32,945
October.....	2,434,015	2,391,478	1,271,976	425,093	694,409	6,902	3,061	32,574
November.....	2,400,290	2,357,755	1,229,705	426,177	701,873	6,896	3,079	32,560
December.....	2,614,126	2,572,000	1,176,596	715,421	679,983	6,806	3,061	32,259
1947: January.....	2,279,039	2,237,128	1,129,710	426,818	680,600	6,864	3,066	31,981
February.....	2,256,832	2,214,638	1,104,137	425,754	684,747	7,080	3,069	32,045
March.....	2,247,293	2,205,082	1,091,197	426,978	686,907	7,039	3,061	32,111
April.....	2,215,389	2,173,262	1,058,678	429,507	685,077	7,174	3,072	31,881
May.....	2,193,113	2,151,264	1,028,043	435,423	687,798	7,247	3,071	31,531
June.....	2,168,935	2,127,715	996,238	437,303	694,174	7,211	3,061	30,948
July.....	2,104,657	2,063,686	937,878	439,617	686,191	7,254	3,074	30,643
Continental United States								
1939.....	926,636	897,579	179,380	318,802	399,397	5,373	2,180	21,504
1943.....	2,927,288	2,889,682	2,071,261	363,297	455,124	6,171	2,546	28,889
1946: July.....	2,266,780	2,230,972	1,159,087	419,282	652,603	6,697	2,995	26,116
August.....	2,249,059	2,213,468	1,129,390	422,906	661,172	6,736	2,968	25,887
September.....	2,198,448	2,163,274	1,074,344	423,331	665,599	6,825	3,007	25,342
October.....	2,118,825	2,084,103	992,574	423,702	667,827	6,902	2,993	24,827
November.....	2,084,062	2,049,287	949,115	424,785	675,387	6,896	3,010	24,869
December.....	2,307,993	2,273,572	906,763	713,160	653,649	6,806	2,992	24,623
1947: January.....	1,982,574	1,948,312	868,473	425,425	654,414	6,864	2,998	24,400
February.....	1,971,647	1,937,231	854,850	424,339	658,142	7,080	3,001	24,335
March.....	1,964,820	1,930,725	844,818	425,567	660,340	7,039	2,993	24,063
April.....	1,942,834	1,909,052	822,597	428,090	658,365	7,174	3,004	23,604
May.....	1,924,582	1,890,920	796,135	433,996	660,789	7,247	3,003	23,412
June.....	1,905,107	1,871,898	769,268	435,831	666,799	7,211	2,993	23,005
July.....	1,847,425	1,814,178	719,413	438,110	658,655	7,254	3,006	22,987

¹ Employment represents an average for the year or is as of the first of the month. Data for the executive branch are reported through the Civil Service Commission; data for the legislative and judicial branches and Government corporations are reported directly to the Bureau of Labor Statistics.

² From 1939 through June 1943 employment was reported for all areas monthly and employment within continental United States was secured by deducting the number of persons outside the continental area, which was estimated from actual reports as of January of 1939 and 1940 and July of 1941 and 1943. Beginning July 1943, employment within continental United States was reported monthly and the number of persons outside the country (estimated from quarterly reports) was added to secure employment in all areas.

³ Data for current months cover the following corporations: Federal Reserve banks, banks of the Farm Credit Administration, and the Panama Railroad Company. Data for earlier years include at various times the following additional corporations: Inland Waterways Corporation, Spruce Production Corporation, and certain employees of the Federal Deposit Insurance Corporation and of the Office of the Comptroller of the Currency, Treasury Department. Corporations not included in this column are under the executive branch.

⁴ Covers the War and Navy Departments, Maritime Commission, National Advisory Committee for Aeronautics, The Panama Canal, and, until their abolition or amalgamation with a peacetime agency, the agencies created specifically to meet war and reconversion emergencies.

⁵ Prior to December 1943, employment data were adjusted upwards to convert the temporary substitute employees from a full-time equivalent to a name-count basis in order to be consistent with data reported subsequently. Prior to July 1945, clerks at third-class post offices were hired on a contract basis and therefore, because of being private employees, are excluded here. They are included beginning July 1945, however, when they were placed on the regular Federal pay roll by congressional action. Substitute rural mail carriers, which have been included in data published by the Civil Service Commission since September 1945, are excluded here. Employment figures include fourth-class postmasters in all months. Additional employment necessitated by the swollen Christmas business is included in December of each year; it is excluded from published figures of the Civil Service Commission beginning December 1942.

TABLE A-13: Total Federal Pay Rolls by Branch and Agency¹

[In thousands]

Year and month	All branches	Executive ²				Legislative	Judicial	Government corporations ³
		Total	Defense agencies ⁴	Post Office Department ⁵	All other agencies			
All areas (including outside continental United States)								
1939.....	\$1,753,151	\$1,688,684	\$357,628	\$586,346	\$744,710	\$14,765	\$6,691	\$43,011
1944 ⁶	8,301,467	8,206,767	6,178,743	864,947	1,163,077	18,127	9,274	67,299
1946: July.....	561,423	552,335	282,855	95,601	173,879	2,169	1,041	5,878
August.....	568,811	559,734	291,914	95,873	171,947	2,158	1,141	5,778
September.....	551,286	542,388	286,663	94,329	161,366	2,139	1,106	5,653
October.....	564,372	555,048	278,795	96,805	179,448	2,194	1,190	5,939
November.....	524,421	515,284	255,098	96,836	163,350	2,127	1,193	5,817
December.....	569,003	559,755	259,348	137,277	163,130	2,166	1,190	5,892
1947: January.....	532,509	522,987	246,330	97,190	179,467	2,369	1,222	5,931
February.....	492,218	482,962	229,269	94,525	159,168	2,308	1,090	5,858
March.....	514,403	505,040	244,794	97,002	163,244	2,365	1,140	5,858
April.....	505,054	495,509	231,598	96,444	167,467	2,440	1,178	5,927
May.....	512,961	503,651	234,047	95,256	174,348	2,439	1,181	5,690
June.....	519,555	510,332	243,430	93,506	173,396	2,425	1,149	5,649
July.....	513,423	503,917	231,175	95,092	177,650	2,462	1,329	5,715
Continental United States								
1944 ⁶	\$7,628,373	\$7,541,181	\$5,553,522	\$862,271	\$1,125,388	\$18,127	\$8,878	\$60,187
1946: July.....	523,580	515,212	252,237	95,298	167,677	2,169	1,005	5,194
August.....	531,587	523,242	261,826	95,572	165,844	2,158	1,106	5,081
September.....	515,735	507,581	258,164	94,031	155,386	2,139	1,072	4,943
October.....	527,569	518,986	249,624	96,507	172,855	2,194	1,154	5,235
November.....	488,700	480,294	226,474	96,538	157,282	2,127	1,160	5,119
December.....	532,354	523,818	230,194	136,878	156,746	2,166	1,155	5,215
1947: January.....	490,368	481,517	211,379	96,869	173,269	2,369	1,183	5,290
February.....	450,172	441,602	193,834	94,203	153,565	2,309	1,055	5,206
March.....	469,854	461,282	207,247	96,679	157,356	2,365	1,105	5,102
April.....	462,991	454,194	196,756	96,128	161,310	2,440	1,143	5,214
May.....	468,696	460,075	197,324	94,936	167,815	2,439	1,145	5,037
June.....	472,168	463,608	203,594	93,185	166,829	2,425	1,114	5,021
July.....	466,153	457,325	192,129	94,766	170,430	2,462	1,292	5,074

¹ Data are from a series revised June 1947 to adjust pay rolls, which from July 1945 until December 1946 were reported for pay periods ending during the month, to cover the entire calendar month. Data for the executive branch are reported through the Civil Service Commission, data for the legislative and judicial branches and Government corporations are reported directly to the Bureau of Labor Statistics.

² From 1939 through May 1943, pay rolls were reported for all areas monthly. Beginning June 1943, some agencies reported pay rolls for all areas and some reported pay rolls for the continental area only. Pay rolls for areas outside continental United States from June 1943 through November 1946 (except for the War and Navy Departments for which these data were reported monthly) were secured by multiplying employment in these areas (see footnote 2, table A-12 for derivation of the employment) by the average pay per person in March 1944, as revealed in a survey as of that date, adjusted

for the salary increases given in July 1945 and July 1946. Beginning December 1946 pay rolls for areas outside the country are reported monthly by most agencies.

³ See footnote 3, table A-12.

⁴ See footnote 4, table A-12.

⁵ Beginning July 1945, pay is included of clerks at third-class post offices who previously were hired on a contract basis and therefore were private employees and of fourth-class postmasters who previously were recompensed by the retention of a part of the postal receipts. Both these groups were placed on a regular salary basis in July 1945 by congressional action.

⁶ Data are shown for 1944, instead of 1943 as in the other Federal tables because pay rolls for employment in areas outside continental United States are not available prior to June 1943.

TABLE A-14: Total Government Employment and Pay Rolls in Washington, D. C., by Branch and Agency¹

Year and month	Total government	District of Columbia Government	Federal					Legislative	Judicial
			Total	Executive 1					
				All agencies	Defense agencies 2	Post Office Department 4	All other agencies		
Employment 3									
1939.....	143,548	13,978	129,570	123,773	18,761	5,099	99,913	5,373	424
1943.....	300,720	15,867	284,853	278,176	144,133	8,273	125,770	6,171	506
1946: July.....	259,765	17,372	242,393	235,112	87,348	7,523	140,241	6,697	584
August.....	259,511	17,460	242,051	234,758	86,883	7,549	140,326	6,736	557
September.....	257,448	17,460	239,988	232,602	86,307	7,547	138,748	6,825	561
October.....	250,826	17,501	233,325	225,862	81,495	7,495	136,872	6,902	561
November.....	249,811	17,606	232,205	224,742	79,085	7,521	138,136	6,896	567
December.....	252,539	17,582	234,957	227,582	78,383	11,036	138,163	6,806	569
1947: January.....	246,528	17,795	228,733	221,293	75,676	7,819	137,798	6,864	576
February.....	245,769	17,912	227,857	220,206	75,284	7,618	137,304	7,080	571
March.....	244,991	18,012	226,979	219,367	75,304	7,552	136,511	7,039	573
April.....	243,715	17,981	225,734	217,984	75,052	7,466	135,466	7,174	576
May.....	241,053	18,024	223,029	215,210	73,309	7,413	134,488	7,246	573
June.....	237,850	18,512	219,338	211,554	71,175	7,309	133,070	7,215	569
July.....	230,360	17,616	212,726	204,899	67,968	7,093	129,838	7,254	573
Pay rolls									
1939.....	\$305,728	\$25,226	\$280,502	\$264,527	\$37,825	\$12,524	\$214,178	\$14,765	\$1,209
1943.....	737,792	32,884	704,908	685,510	352,008	20,070	313,432	17,785	1,613
1946: July.....	68,063	3,136	64,927	62,567	21,077	2,289	39,201	2,169	191
August.....	65,659	3,007	62,652	60,294	21,007	2,262	37,025	2,158	200
September.....	65,619	4,011	61,608	59,277	21,118	2,214	35,945	2,139	192
October.....	69,896	4,242	65,654	63,250	21,978	2,285	38,987	2,194	210
November.....	64,607	4,090	60,517	58,194	20,758	2,261	35,175	2,127	196
December.....	67,555	4,189	63,366	60,993	20,205	3,202	37,586	2,166	207
1947: January.....	69,701	4,326	65,375	62,791	21,003	2,355	39,433	2,369	215
February.....	62,981	4,067	58,914	56,417	19,062	2,268	35,087	2,308	189
March.....	64,999	4,940	60,059	58,295	19,653	2,272	36,370	2,365	199
April.....	66,094	4,233	61,861	59,219	19,443	2,254	37,522	2,440	202
May.....	67,026	4,251	62,775	60,135	19,295	2,231	38,609	2,439	201
June.....	63,389	4,204	59,185	56,564	17,837	2,179	36,548	2,425	196
July.....	63,837	3,326	60,511	57,839	17,818	2,276	37,745	2,462	210

¹ Data for the legislative and judicial branches and District of Columbia Government are reported to the Bureau of Labor Statistics. Data for the executive branch are reported through the Civil Service Commission but differ from those published by the Civil Service Commission in the following respects: (1) include in December the additional postal employment necessitated by the swollen Christmas business, excluded from published Civil Service Commission figures starting 1942; (2) include an upward adjustment in Post Office Department employment prior to December 1943 to convert temporary substitute employees from a full-time equivalent to a name-count basis, the latter being the basis on which data for subsequent months have been reported; this adjustment has not yet been made in published figures of the Civil Service Commission; (3) exclude persons working without compensation or for \$1 a year or month, included by the Civil Service Commission from June through November 1943; (4) certain other revisions have been incorporated in the above data which have not yet appeared in published figures of the Civil Service Commission; (5) employment published by the Civil Service Commission as of the last day of the month is presented here as of the first day of the next month.

² Beginning January 1942, data cover, in addition to the area inside the District of Columbia, the adjacent sections of Maryland and Virginia which are defined by the Bureau of the Census as in the metropolitan area.

³ Covers the War and Navy Departments, Maritime Commission, National Advisory Committee for Aeronautics, The Panama Canal, and until their abolition or amalgamation with a peacetime agency, the agencies created specifically to meet war and reconversion emergencies.

⁴ For ways in which data differ from published figures of the Civil Service Commission, see items 1 and 2 of footnote 1.

⁵ Yearly figures represent averages. Monthly figures represent (1) the number of regular employees in pay status on the first day of the month plus the number of intermittent employees who were paid during the preceding month for the executive branch, (2) the number of employees on the pay roll with pay during the pay period ending just before the first of the month for the legislative and judicial branches, and (3) the number of employees on the pay roll with pay during the pay period ending on or just before the last of the month for the District of Columbia Government.

TABLE A-15: Personnel and Pay in Military Branch¹ of Federal Government¹

[In thousands]

Year and month	Personnel (average for year or as of first of month) ²			Type of pay (total for year or for month)				
	Total	Army ³	Navy ⁴	Total	Pay rolls ⁵	Mustering out pay ⁶	Family allowances ⁷	Leave payments ⁸
1939.....	345	191	154	\$331,523	\$331,523			
1943.....	8,944	6,733	2,211	11,173,186	10,140,852		\$1,032,334	
1946: July.....	3,050	1,890	1,160	618,256	459,890	\$115,689	42,677	
August.....	2,745	1,815	930	559,112	413,575	104,937	40,583	\$17
September.....	2,474	1,731	743	507,851	377,702	90,570	37,572	2,007
October.....	2,477	1,738	739	607,943	378,853	64,343	35,650	129,097
November.....	2,441	1,717	724	733,071	345,969	50,617	35,316	301,169
December.....	2,204	1,511	693	683,036	320,533	45,315	33,165	284,023
1947: January.....	1,087	1,319	668	684,875	307,516	29,967	29,052	318,340
February.....	1,906	1,254	652	648,164	294,040	18,722	28,004	307,398
March.....	1,834	1,199	635	651,478	284,441	18,292	26,548	322,197
April.....	1,777	1,148	629	552,071	264,296	17,290	26,085	244,400
May.....	1,703	1,081	622	370,279	264,033	15,022	25,814	65,410
June.....	1,631	1,021	610	335,261	262,505	12,265	24,529	35,962
July.....	1,592	990	602	340,095	261,696	12,227	23,922	42,250

¹ Except for Army personnel for 1939 which is from the Annual Report of the Secretary of War, all data are from reports submitted to the Bureau of Labor Statistics by the various military branches.

² Includes personnel on active duty, those on terminal leave, the missing, and those in the hands of the enemy.

³ Prior to March 1944, data include persons on induction furlough. Prior to June 1942 and after April 1945, Philippine Scouts are included.

⁴ Covers Navy, Marine Corps, and Coast Guard.

⁵ Pay rolls are for personnel on active duty only. For the Army, pay rolls for 1943 represent actual expenditures. Army pay rolls for other periods and Navy pay rolls for all periods represent estimated obligations based on an average monthly personnel count. Pay rolls for the Navy proper include

cash payments for clothing-allowance balances in January, April, July, and October.

⁶ Represents actual expenditures.

⁷ Represents Government's contribution. The men's share is included in the pay rolls.

⁸ Leave payments were authorized by Public Law 704 of the 79th Congress to former enlisted personnel for accrued and unused leave and to present officers and enlisted personnel for leave accrued in excess of 60 days. Payment of present personnel while on terminal leave is included in the pay roll. Value of bonds (representing face value, to which interest will be added at time bonds are cashed) and cash payments are included.

B: Labor Turn-Over

TABLE B-1: Monthly Labor Turn-Over Rates (Per 100 Employees) in Manufacturing Industries¹

Class of turn-over and year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Total accession:												
1947	6.0	5.0	5.1	5.1	4.8	5.3						
1946	8.5	6.8	7.1	6.7	6.1	6.7	7.4	7.0	7.1	6.8	5.7	4.3
1945	7.0	5.0	4.9	4.7	5.0	5.9	5.8	5.9	7.4	8.6	8.7	6.9
1943	8.3	7.9	8.3	7.4	7.2	8.4	7.8	7.6	7.7	7.2	6.6	5.2
1939 ²	4.1	3.1	3.3	2.9	3.3	3.9	4.2	5.1	6.2	5.9	4.1	2.8
Total separation:												
1947	4.9	4.5	4.9	5.2	5.4	4.8						
1946	6.8	6.3	6.6	6.3	6.3	5.7	5.8	6.6	6.9	6.3	4.9	4.5
1945	6.2	6.0	6.8	6.6	7.0	7.9	7.7	17.9	12.0	8.6	7.1	5.9
1943	7.1	7.1	7.7	7.5	6.7	7.1	7.6	8.3	8.1	7.0	6.4	6.6
1939 ²	3.2	2.6	3.1	3.5	3.5	3.3	3.3	3.0	2.8	2.9	3.0	3.5
Quit: ⁴												
1947	3.5	3.2	3.5	3.7	3.5	3.2						
1946	4.3	3.9	4.2	4.3	4.2	4.0	4.6	5.3	5.3	4.7	3.7	3.0
1945	4.6	4.3	5.0	4.8	4.8	5.1	5.2	6.2	6.7	5.6	4.7	4.0
1943	4.5	4.7	5.4	5.4	4.8	5.2	5.6	6.3	6.3	5.2	4.5	4.4
1939 ²	.9	.6	.8	.8	.7	.7	.7	.8	1.1	.9	.8	.7
Discharge:												
1947	.4	.4	.4	.4	.4	.4						
1946	.5	.5	.4	.4	.4	.3	.4	.4	.4	.4	.4	.4
1945	.7	.7	.7	.6	.6	.7	.6	.7	.6	.5	.5	.4
1943	.5	.5	.6	.5	.6	.6	.7	.7	.6	.6	.6	.6
1939 ²	.1	.1	.1	.1	.1	.1	.1	.1	.1	.2	.2	.1
Lay-off: ⁵												
1947	.9	.8	.9	1.0	1.4	1.1						
1946	1.8	1.7	1.8	1.4	1.5	1.2	.6	.7	1.0	1.0	.7	1.0
1945	.6	.7	.7	.8	1.2	1.7	1.5	10.7	4.5	2.3	1.7	1.3
1943	.7	.5	.5	.6	.5	.5	.5	.5	.5	.5	.7	1.0
1939 ²	2.2	1.9	2.2	2.6	2.7	2.5	2.5	2.1	1.6	1.8	2.0	2.7
Miscellaneous, including military: ⁶												
1947	.1	.1	.1	.1	.1	.1						
1946	.2	.2	.2	.2	.2	.2	.2	.2	.2	.2	.1	.1
1945	.3	.3	.4	.4	.4	.4	.4	.3	.2	.2	.2	.2
1943	1.4	1.4	1.2	1.0	.8	.8	.8	.8	.7	.7	.6	.6

¹ Month-to-month changes in total employment in manufacturing industries as indicated by labor turn-over rates are not precisely comparable to those shown by the Bureau's employment and pay-roll reports, as the former are based on data for the entire month, while the latter, for the most part, refer to a one-week period ending nearest the middle of the month. The turn-over sample is not so extensive as that of the employment and pay-roll survey—proportionately fewer small plants are included; printing and publishing, and certain seasonal industries, such as canning and preserving, are not covered. Plants on strike are also excluded. For the month of May rates are based on reports from 6,900 establishments employing 4,500,000 workers.

² Preliminary figures.

³ Prior to 1943, rates relate to wage earners only.

⁴ Prior to September 1940, miscellaneous separations were included with quits.

⁵ Including temporary, indeterminate (of more than 7 days' duration), and permanent lay-offs.

TABLE B-2: Monthly Labor Turn-Over Rates (Per 100 Employees) in Selected Groups and Industries,¹ by Class of Turn-Over

Group and industry	Accession 1947		Separation 1947									
			Total		Quit		Discharge		Lay-off		Misc. inc. military	
	June ²	May	June ²	May	June ²	May	June ²	May	June ²	May	June ²	May
Manufacturing*												
Durable goods	5.5	4.9	5.0	5.6	3.2	3.5	0.4	0.4	1.3	1.6	0.1	0.1
Nondurable goods	5.2	4.6	4.4	5.0	3.1	3.4	.3	.3	.9	1.2	.1	.1
Iron and steel and their products	5.0	4.3	4.1	4.3	2.9	3.1	.4	.4	.6	.7	.2	.1
Blast furnaces, steel works, and rolling mills	4.4	3.6	3.0	2.7	2.4	2.2	.2	.2	.2	.2	.2	.1
Gray-iron castings	7.4	7.6	7.0	8.0	5.1	6.2	1.0	1.0	.6	.5	.3	.3
Malleable-iron castings	7.1	7.6	6.0	6.8	5.2	5.5	.6	.5	.1	.5	.1	.3
Steel castings	4.2	4.5	3.9	5.3	2.5	3.2	.4	.5	.8	1.4	.2	.2
Cast-iron pipe and fittings	3.5	3.7	4.0	4.4	2.8	3.3	.2	.5	.9	.5	.1	.1
Tin cans and other tinware	7.8	5.0	5.0	7.1	4.0	3.3	.5	.6	.4	3.1	.1	.1
Wire products	3.3	3.0	2.6	3.5	1.6	2.2	.3	.3	.4	.8	.3	.2
Cutlery and edge tools	1.6	2.8	6.7	9.5	2.0	3.1	.6	.7	4.0	5.6	.1	.1
Tools (except edge tools, machine tools, files, and saws)	4.1	3.3	4.2	4.9	2.9	3.6	.3	.5	.9	.8	.1	(³)
Hardware	5.8	5.9	5.5	6.5	4.4	4.9	.4	.5	.6	1.0	.1	.1

See footnotes at end of table.

TABLE B-2: Monthly Labor Turn-Over Rates (Per 100 Employees) in Selected Groups and Industries,¹ by Class of Turn-Over—Continued

Group and Industry	Accession 1947		Separation 1947									
			Total		Quit		Discharge		Lay-off		Misc. inc. military	
	June ²	May	June ²	May	June ²	May	June ²	May	June ²	May	June ²	May
<i>Manufacturing—Continued</i>												
Iron and steel and their products—Continued												
Stoves, oil burners, and heating equipment	7.0	5.5	7.0	7.4	4.6	4.1	0.8	0.8	1.4	2.4	0.2	0.1
Steam and hot-water heating apparatus and steam fittings	4.9	4.1	5.2	6.6	2.8	4.3	.4	.6	1.9	1.6	.1	.1
Stamped and enameled ware and galvanizing	7.1	5.7	5.0	5.9	3.7	4.5	.4	.5	.8	.8	.1	.1
Fabricated structural-metal products	6.2	4.9	4.6	5.3	2.8	3.2	.4	.6	1.3	1.4	.1	.1
Bolts, nuts, washers, and rivets	2.2	2.7	2.7	3.8	2.0	2.4	.3	.4	.3	.9	.1	.1
Forgings, iron and steel	2.8	4.0	3.1	5.1	2.0	3.1	.4	.5	.5	1.4	.2	.1
Electrical machinery												
Electrical equipment for industrial use	3.8	3.7	4.3	5.3	2.5	2.7	.4	.4	1.3	2.1	.1	.1
Radio, radio equipment, and phonographs	2.9	2.4	2.6	3.5	1.6	1.9	.2	.2	.6	1.2	.2	.2
Communication equipment, except radios	5.0	4.9	6.9	8.8	3.2	3.4	.8	.8	2.8	4.5	.1	.1
	2.8	2.0	3.8	3.0	2.7	2.4	.3	.2	.7	.3	.1	.1
Machinery, except electrical												
Engines and turbines	5.3	4.2	4.3	4.4	2.4	2.8	.4	.4	1.4	1.1	.1	.1
Agricultural machinery and tractors	4.4	4.0	4.9	5.6	2.2	2.9	.4	.6	2.2	2.0	.1	.1
Machine tools	(4)	4.9	(4)	4.4	(4)	3.5	(4)	.4	(4)	.3	(4)	.2
Machine-tool accessories	2.0	2.2	4.0	4.4	1.8	1.8	.3	.3	1.8	2.1	.1	.2
Metalworking machinery and equipment, not elsewhere classified	2.9	2.4	5.6	6.5	1.6	2.1	.4	.5	3.5	3.8	.1	.1
General industrial machinery, except pumps	3.7	3.0	3.2	3.5	2.5	2.7	.3	.3	.3	.4	.1	.1
Pumps and pumping equipment	3.8	3.3	3.6	4.3	2.1	2.5	.4	.4	1.0	1.3	.1	.1
	3.7	3.2	3.8	4.1	2.3	2.7	.7	.6	.8	.7	(4)	.1
Transportation equipment, except automobiles												
Aircraft	6.9	6.2	8.8	10.9	4.0	4.2	.5	.5	4.2	6.1	.1	.1
Aircraft parts, including engines	5.4	4.6	8.2	12.4	4.5	4.9	.4	.4	3.2	7.0	.1	.1
Shipbuilding and repairs	3.3	2.7	4.3	5.3	2.1	2.8	.4	.4	1.7	2.1	.1	(4)
	9.3	9.7	12.4	12.3	4.6	4.7	.9	.8	6.8	6.7	.1	.1
Automobiles												
Motor vehicles, bodies, and trailers	5.2	3.8	4.2	5.0	3.1	3.0	.5	.4	.5	1.5	.1	.1
Motor-vehicle parts and accessories	4.9	3.5	4.1	4.9	3.1	2.9	.5	.4	.4	1.5	.1	.1
	5.9	4.3	4.6	5.7	3.0	3.3	.6	.5	.8	1.7	.2	.2
Nonferrous metals and their products												
Primary smelting and refining, except aluminum and magnesium	3.9	3.5	5.2	6.6	2.6	3.1	.4	.5	2.1	2.9	.1	.1
Rolling and drawing of copper and copper alloys	5.3	3.9	3.9	3.8	2.5	2.4	.4	.4	.8	.9	.2	.1
Lighting equipment	.8	1.3	5.4	4.6	1.4	2.2	.2	.2	3.7	2.1	.1	.1
Nonferrous-metal foundries, except aluminum and magnesium	5.8	5.2	4.8	5.1	3.8	3.9	.6	.5	.4	.7	(4)	(4)
	3.4	3.8	4.8	7.3	2.9	3.6	.4	.5	1.3	3.0	.2	.2
Lumber and timber basic products												
Sawmills	8.1	8.8	6.1	7.5	5.1	6.4	.4	.5	.5	.5	.1	.1
Planing and plywood mills	8.1	8.6	5.9	7.0	4.9	6.0	.4	.4	.5	.5	.1	.1
	6.2	6.0	4.7	5.2	3.7	4.6	.4	.4	.5	.2	.1	(4)
Furniture and finished lumber products												
Furniture, including mattresses and bedsprings	7.1	7.1	6.8	7.6	4.4	5.5	.6	.6	1.7	1.4	.1	.1
	7.3	7.3	6.8	7.5	4.5	5.5	.7	.6	1.5	1.3	.1	.1
Stone, clay, and glass products												
Glass and glass products	5.1	4.1	5.3	4.7	2.9	2.9	.5	.4	1.7	1.3	.2	.1
Cement	4.8	4.0	6.8	5.4	2.6	2.5	.7	.5	3.3	2.2	.2	.2
Brick, tile, and terra cotta	6.3	4.6	4.9	4.3	3.5	3.5	.5	.5	.6	.2	.3	.1
Pottery and related products	5.5	5.7	4.6	5.3	3.2	3.7	.5	.7	.7	.7	.2	.2
	5.2	3.6	4.6	4.7	3.4	3.4	.5	.3	.6	.9	.1	.1
Textile-mill products												
Cotton	4.3	4.5	5.0	5.9	3.2	3.8	.3	.4	1.4	1.6	.1	.1
Silk and rayon goods	4.9	5.3	6.1	6.7	4.2	4.7	.4	.5	1.4	1.4	.1	.1
Woolen and worsted, except dyeing and finishing	3.4	3.4	3.5	4.5	2.2	2.7	.2	.3	1.0	1.4	.1	.1
Hosiery, full-fashioned	3.3	3.4	4.4	5.2	1.9	2.6	.3	.3	2.0	2.2	.2	.1
Hosiery, seamless	4.0	2.4	3.5	4.0	2.2	2.2	.2	.2	1.0	1.5	.1	.1
Knitted underwear	4.3	5.1	7.0	6.9	4.1	4.2	.2	.2	2.5	2.3	.2	.2
Dyeing and finishing textiles, including woolen and worsted	5.8	5.4	4.1	4.8	3.5	4.0	.2	.2	.4	.6	(4)	(4)
	3.3	2.6	3.0	3.8	1.8	2.2	.4	.6	.7	.9	.1	.1
Apparel and other finished textile products												
Men's and boys' suits, coats, and overcoats	5.2	5.4	4.6	5.8	3.8	4.2	.2	.2	.6	1.4	(4)	(4)
Men's and boys' furnishings, work clothing, and allied garments	4.3	4.0	3.1	3.5	2.8	3.1	.1	.2	.2	.2	(4)	(4)
	5.1	5.5	4.9	5.9	4.0	4.3	.2	.2	.7	1.4	(4)	(4)
Leather and leather products												
Leather	4.7	4.0	4.4	5.1	3.3	3.5	.3	.3	.7	1.2	.1	.1
Boots and shoes	2.8	2.6	3.1	3.3	1.9	2.2	.3	.3	.8	.7	.1	.1
	5.0	4.3	4.7	5.4	3.6	3.8	.3	.3	.7	1.2	.1	.1
Food and kindred products												
Meat products	8.3	6.7	5.5	6.0	4.2	4.3	.4	.4	.8	1.3	.1	.1
Grain-mill products	9.1	10.3	6.3	7.7	3.8	4.6	.7	.8	1.6	2.1	.2	.2
	5.6	4.0	3.0	4.3	2.3	3.2	.2	.3	.4	.8	.1	(4)
Tobacco manufactures												
	4.9	5.9	4.5	6.4	3.2	3.8	.3	.3	.9	2.2	.1	.1
Paper and allied products												
Paper and pulp	4.9	4.1	3.8	4.5	2.7	3.1	.4	.5	.5	.7	.2	.2
Paper boxes	4.8	3.9	3.2	3.4	2.2	2.5	.4	.4	.3	.3	.3	.2
	5.1	4.3	5.8	6.7	3.9	4.7	.5	.6	1.2	1.1	.2	.3
Chemicals and allied products												
Paints, varnishes, and colors	3.5	2.9	3.0	2.8	1.6	1.7	.3	.3	1.0	.7	.1	.1
Rayon and allied products	3.7	3.2	3.1	3.0	1.5	1.9	.4	.4	1.1	.7	.1	(4)
Industrial chemicals, except explosives	2.9	2.2	1.9	1.8	1.4	1.4	.1	.2	.3	.1	.1	.1
	3.9	3.1	3.3	3.0	1.7	1.7	.3	.3	1.2	.9	.1	.1

See footnotes at end of table.

TABLE B-2: Monthly Labor Turn-Over Rates (Per 100 Employees) in Selected Groups and Industries,¹ by Class of Turn-Over—Continued

Group and industry	Accession 1947		Separation 1947									
			Total		Quit		Discharge		Lay-off		Misc. inc. military	
	June ²	May	June ²	May	June ²	May	June ²	May	June ²	May	June ²	May
Manufacturing—Continued												
Product of petroleum and coal.....	3.2	2.7	1.0	1.1	0.6	0.8	0.2	0.1	0.1	0.1	0.1	0.1
Petroleum refining.....	3.0	2.6	1.0	1.0	.6	.7	.2	.1	.1	.1	.1	.1
Rubber products.....	2.8	2.5	3.4	4.7	2.3	2.6	.2	.3	.8	1.7	.1	.1
Rubber tires and inner tubes.....	1.9	1.4	2.8	3.6	1.8	1.8	.1	.2	.8	1.4	.1	.2
Rubber footwear and related products.....	3.9	3.7	4.2	6.1	3.5	4.2	.2	.3	.4	1.6	.1	(³)
Miscellaneous rubber industries.....	4.4	4.3	4.6	6.5	3.0	3.6	.5	.5	1.0	2.3	.1	.1
Miscellaneous industries.....	3.2	2.8	3.4	3.9	2.0	2.3	.2	.3	1.1	1.2	.1	.1
Nonmanufacturing												
Metal mining*.....	7.3	6.5	5.7	6.0	4.5	4.9	.5	.5	.4	.4	.3	.2
Iron-ore.....	5.4	4.1	3.1	2.7	1.9	2.1	.3	.3	.4	.1	.5	.2
Copper-ore.....	7.9	7.6	6.6	7.2	5.5	6.4	.6	.6	.4	.1	.1	.1
Lead- and zinc-ore.....	7.7	7.5	6.8	7.4	5.6	6.1	.6	.6	.5	.6	.1	.1
Coal mining*.....												
Anthracite mining.....	1.3	1.5	1.8	2.1	1.2	1.6	(³)	(³)	.5	.4	.1	.1
Bituminous-coal mining.....	2.3	3.5	2.7	3.6	2.3	3.1	.1	.2	.2	.2	.1	.1
Public utilities:												
Telephone.....	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)
Telegraph.....	(⁴)	2.3	(⁴)	2.8	(⁴)	2.3	(⁴)	.1	(⁴)	.3	(⁴)	.1

¹ Since January 1943 manufacturing firms reporting labor turn-over information have been assigned industry codes on the basis of current products. Most plants in the employment and pay-roll sample, comprising those which were in operation in 1939, are classified according to their major activity at that time, regardless of any subsequent change in major products. Labor turn-over data, beginning in January 1943, refer to all employees. Employment information for all employees is available for major manufacturing industry groups; for individual industries these data refer to production workers only.

² Preliminary figures.

³ Less than 0.05.

⁴ Not available.

* For the month of May rates are based on reports as follows:
Manufacturing: 6,900 establishments—4,500,000 workers.
Mining: 500 establishments—240,000 persons.

TABLE B-3: Monthly Labor Turn-Over Rates for Men and Women in All Manufacturing and Selected Groups¹

Industry group	Men						Women					
	Accession 1947		Separation 1947				Accession 1947		Separation 1947			
			Total		Quit				Total		Quit	
	June ²	May	June ²	May	June ²	May	June ²	May	June ²	May	June ²	May
	(Per 100 men employees)						(Per 100 women employees)					
All manufacturing.....	5.3	4.7	4.3	5.1	2.8	3.2	5.6	5.0	5.6	6.6	4.0	4.4
Durable goods.....	5.6	4.9	4.8	5.7	3.1	3.5	4.8	4.4	5.8	6.8	3.4	3.7
Nondurable goods.....	4.8	4.4	3.4	4.3	2.4	2.7	5.8	5.1	5.5	6.3	4.2	4.5
Iron and steel and their products.....	5.0	4.5	3.9	4.5	2.8	3.2	4.9	4.4	5.1	6.4	3.3	3.8
Electrical machinery.....	3.4	3.2	3.3	4.3	1.9	2.1	4.7	4.6	6.2	7.6	3.7	3.8
Machinery, except electrical.....	5.2	4.2	4.1	4.4	2.3	2.7	5.0	4.1	5.1	4.9	2.8	3.0
Transportation equipment except automobiles.....	7.4	6.3	8.7	11.3	4.1	4.3	4.0	3.6	6.6	9.5	3.3	3.3
Automobiles.....	4.9	3.6	3.8	4.9	2.7	2.9	5.3	3.6	4.0	7.1	2.5	2.8
Nonferrous metals and their products.....	3.9	3.5	5.1	6.5	2.4	2.9	4.2	3.6	5.7	6.9	3.4	3.6
Lumber and timber basic products.....	8.3	9.0	6.2	7.7	5.2	6.6	4.4	4.5	5.5	4.1	4.1	3.7
Furniture and finished lumber products.....	7.4	7.1	6.7	7.5	4.4	5.4	5.9	7.0	7.2	7.9	4.2	6.0
Stone, clay, and glass products.....	5.2	4.0	4.8	4.5	2.7	2.8	4.7	4.4	7.6	6.2	3.7	3.5
Textile-mill products.....	4.1	4.4	4.4	5.3	2.7	3.4	4.6	4.6	5.8	6.5	3.9	4.3
Apparel and other finished textile products.....	4.2	5.4	3.9	5.9	2.6	3.0	5.5	5.4	4.8	5.6	4.1	4.5
Leather and leather products.....	4.0	3.5	4.0	4.5	2.7	2.8	5.9	4.7	5.4	5.8	4.5	4.6
Food and kindred products.....	7.3	6.5	3.8	5.1	3.4	3.5	11.1	7.6	7.8	9.6	6.5	7.1
Tobacco manufactures.....	3.6	5.8	2.8	5.6	1.8	2.1	5.6	5.9	5.4	7.0	4.0	4.8
Paper and allied products.....	5.0	4.0	3.3	3.8	2.4	2.9	4.5	4.1	5.9	6.7	3.9	4.1
Chemicals and allied products.....	3.4	2.7	2.7	2.5	1.4	1.5	4.2	3.4	4.4	4.0	2.9	2.7
Products of petroleum and coal.....	3.2	2.7	1.1	1.1	.6	.7	3.0	2.4	2.1	3.0	1.8	2.6
Rubber products.....	2.6	2.4	3.1	4.0	2.1	2.3	3.6	2.9	4.9	6.8	3.2	3.6
Miscellaneous industries.....	2.7	2.4	2.8	3.4	1.6	2.0	4.1	3.6	4.2	4.6	2.7	2.8

¹ These figures are based on a slightly smaller sample than that for all employees, inasmuch as some firms do not report separate data for women. Rates for May are based on 6,100 reports covering 4,200,000 workers.

² Preliminary figures.

C: Earnings and Hours

TABLE C-1: Average Earnings and Hours in Manufacturing and Nonmanufacturing Industries¹

Year and month										Iron and steel and their products								
	All manufacturing			Durable goods			Nondurable goods			Total: Iron and steel and their products			Blast furnaces, steel works, and rolling mills			Gray-iron and semi-steel castings		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
1939: Average	\$23.86	37.7	Cents 63.3	\$26.50	38.0	Cents 69.8	\$21.78	37.4	58.2	\$27.52	37.2	Cents 73.9	\$29.88	35.3	Cents 84.5	\$25.93	37.1	Cents 69.9
1941: January	26.64	39.0	68.3	30.48	40.7	74.9	22.75	37.3	61.0	31.07	40.4	76.9	33.60	40.2	86.9	30.45	41.2	73.9
1946: June	43.31	40.0	108.4	46.32	39.8	116.5	40.28	40.2	100.3	46.74	38.8	120.6	46.98	36.0	130.3	50.01	41.8	119.8
July	43.38	39.7	109.3	46.24	39.3	117.7	40.46	40.1	100.9	46.80	38.5	121.6	47.85	36.4	131.4	48.53	40.4	120.3
August	44.99	40.5	111.2	48.02	40.5	118.6	41.89	40.4	103.6	48.78	39.9	122.2	49.84	38.2	130.5	50.90	41.8	121.8
September	45.39	40.3	112.6	48.36	40.3	120.1	42.34	40.3	105.0	49.29	39.7	124.1	50.28	38.0	132.5	52.58	42.3	124.3
October	45.73	40.5	113.0	48.90	40.7	120.2	42.45	40.2	105.6	49.86	40.3	123.9	50.39	38.7	130.3	53.36	42.8	124.8
November	45.79	40.2	113.9	48.62	40.2	121.0	42.87	40.3	106.5	49.91	40.0	124.7	50.82	38.8	131.0	52.78	41.8	126.3
December	46.96	40.9	114.8	49.57	40.8	121.6	44.24	41.1	107.7	49.67	39.8	124.8	48.59	37.0	131.4	53.98	42.6	126.6
1947: January	47.10	40.6	116.1	49.60	40.5	122.4	44.47	40.7	109.4	50.64	40.2	126.1	50.89	38.2	133.2	54.43	42.7	127.5
February	47.29	40.4	117.0	49.74	40.5	122.9	44.67	40.4	110.7	50.33	40.0	125.8	50.67	38.5	131.7	54.04	42.1	128.3
March	47.69	40.4	118.0	50.30	40.7	123.6	44.89	40.1	111.9	51.31	40.4	126.9	51.77	38.9	133.3	54.49	42.3	129.0
April	47.60	40.1	118.6	50.34	40.5	124.3	44.40	39.6	112.2	51.78	40.4	128.0	52.83	39.2	134.7	54.57	42.0	130.0
May	48.46	40.1	120.8	51.72	40.5	127.8	44.93	39.8	113.0	53.70	40.3	133.3	56.26	38.9	144.5	56.34	42.6	132.2
June	49.37	40.3	122.7	52.95	40.6	130.3	45.47	39.8	114.1	55.11	40.4	136.3	58.12	39.5	147.2	56.71	42.3	134.3
Iron and steel and their products—Continued																		
	Malleable-iron castings			Steel castings			Cast-iron pipe and fittings			Tin cans and other tinware			Wirework			Cutlery and edge tools		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
1939: Average	\$24.16	36.0	Cents 67.1	\$27.97	36.9	75.9	\$21.33	36.4	58.1	\$23.61	38.8	Cents 61.1	\$25.96	38.1	Cents 68.3	\$23.11	39.1	Cents 60.1
1941: January	28.42	40.2	70.7	32.27	41.4	78.0	25.42	40.5	62.6	25.31	39.8	63.9	28.27	39.7	71.2	25.90	40.5	65.2
1946: June	48.36	39.9	121.1	48.29	38.4	125.8	41.11	39.7	103.6	42.43	40.2	105.4	47.20	41.2	114.4	45.03	43.4	103.7
July	49.60	40.6	122.2	46.35	36.7	126.3	41.55	40.1	103.5	43.47	40.9	106.7	49.61	41.9	118.3	43.74	42.3	103.2
August	51.28	40.7	126.0	49.32	38.9	126.9	42.30	40.8	103.6	45.97	42.6	108.6	49.36	41.5	118.8	44.98	43.1	104.3
September	51.50	40.7	126.6	49.28	38.3	128.6	43.67	40.7	107.1	46.22	41.9	111.1	49.89	41.3	120.7	45.83	43.0	106.5
October	52.27	40.9	127.7	50.27	38.9	129.3	45.23	42.3	106.8	44.68	40.8	110.0	48.87	40.9	119.6	46.49	43.0	108.0
November	51.74	40.4	128.2	51.87	39.9	129.8	45.92	43.0	106.7	42.68	39.1	109.7	48.94	40.6	120.5	46.41	42.7	108.6
December	51.35	40.3	127.5	51.72	39.8	130.0	46.17	41.8	110.3	44.79	40.8	110.4	49.28	41.0	120.2	47.50	43.3	109.5
1947: January	52.92	40.9	128.8	50.68	39.0	129.8	49.51	43.9	112.8	44.30	40.0	111.1	50.05	41.3	121.3	47.19	42.7	110.4
February	52.81	40.9	129.0	49.72	38.6	128.8	47.90	42.6	112.4	43.78	39.4	111.7	49.60	41.0	120.8	47.59	42.7	111.3
March	52.72	40.5	130.0	52.23	40.0	130.5	48.71	43.0	113.2	44.95	40.3	111.6	50.50	41.2	122.6	47.85	42.9	111.5
April	53.52	41.0	130.6	53.01	40.4	131.1	48.41	42.4	114.2	44.85	40.1	112.7	49.79	40.7	122.4	46.84	41.6	112.6
May	55.02	41.0	134.1	54.33	40.5	134.2	51.86	43.4	119.3	45.66	40.2	113.8	49.72	39.8	125.0	46.94	41.1	114.1
June	54.36	39.8	136.5	55.76	40.2	139.0	52.27	43.0	121.5	47.45	40.3	117.9	52.19	40.1	130.0	48.85	41.9	116.4
Iron and steel and their products—Continued																		
	Tools (except edge tools, machine tools, files, and saws)			Hardware			Plumbers' supplies			Stoves, oil burners, and heating equipment, not elsewhere classified			Steam and hot-water heating apparatus and steam fittings			Stamped and enameled ware and galvanizing		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
1939: Average	\$24.49	39.7	Cents 61.8	\$23.13	38.9	59.3	\$25.80	38.2	67.6	\$25.25	38.1	66.6	\$26.19	37.6	69.7	\$23.92	38.1	62.7
1941: January	29.49	44.7	66.2	25.24	40.9	62.1	27.13	39.0	69.6	26.07	38.7	67.8	30.98	42.5	73.2	26.32	39.4	66.5
1946: June	46.31	43.0	107.7	42.79	40.8	105.1	44.24	39.9	110.8	45.56	40.3	113.1	46.35	39.5	117.4	44.19	39.8	111.0
July	46.16	42.5	108.7	43.75	41.2	106.6	43.98	39.0	112.8	44.68	39.6	112.9	46.28	39.5	117.2	43.15	38.7	111.4
August	46.91	42.4	110.6	44.88	41.7	106.9	46.00	40.2	113.8	47.16	40.6	116.1	47.81	40.3	118.6	45.53	40.5	112.5
September	47.59	42.5	112.1	45.11	41.2	109.5	45.63	39.4	115.7	47.36	40.2	117.8	49.72	40.8	121.9	45.49	39.6	115.0
October	49.01	42.9	114.1	46.24	41.9	110.5	48.64	41.4	117.4	48.89	41.0	119.2	51.45	41.1	125.2	46.83	40.7	115.0
November	49.03	42.4	115.8	45.65	41.3	110.6	48.06	40.7	118.3	48.64	40.6	119.9	50.83	40.6	125.3	46.10	39.7	116.1
December	50.02	43.3	115.6	46.42	41.7	111.3	49.68	41.4	120.2	49.61	41.3	120.1	48.78	39.9	122.2	48.30	41.1	117.6
1947: January	50.39	43.3	116.4	47.04	41.6	111.9	51.27	42.3	121.9	50.26	41.1	122.4	50.12	40.7	123.1	47.57	40.5	117.6
February	49.54	42.6	116.4	47.45	41.9	113.1	48.51	39.9	121.5	49.02	40.2	122.0	50.31	40.7	123.5	46.71	39.6	117.9
March	49.93	42.9	116.3	47.29	41.7	113.5	49.90	40.7	122.7	49.79	40.6	122.6	51.02	40.9	124.6	48.14	40.3	119.3
April	50.48	42.9	117.6	47.90	41.5	115.3	50.22	40.6	123.6	50.11	40.7	123.0	51.63	40.6	127.1	48.44	40.3	120.1
May	50.86	42.5	119.8	48.96	41.7	117.5	49.92	40.0	124.7	50.38	40.2	124.9	51.43	40.1	128.3	49.96	40.1	124.7
June	51.22	42.4	120.7	49.21	41.4	119.3	51.75	40.3	128.2	51.00	40.3	126.7	53.72	40.8	131.6	50.29	39.6	126.9

See footnotes at end of table.

TABLE C-1: Average Earnings and Hours in Manufacturing and Nonmanufacturing Industries¹—Con.

Year and month	Iron and steel and their products—Continued																	
	Fabricated structural and ornamental metalwork			Metal doors, sash, frames, molding and trim ²			Bolts, nuts, washers, and rivets			Forgings, iron and steel			Screw-machine products and wood screws			Steel barrels, kegs, and drums ²		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
1939: Average.....	\$27.95	38.5	Cents 72.7				\$26.04	37.7	69.0	\$29.45	38.4	76.7						
1941: January.....	31.01	41.8	74.3				29.58	41.9	70.6	36.75	45.0	81.8						
1946: June.....	46.59	39.8	117.7	\$47.08	41.8	112.5	44.29	39.2	112.6	51.16	39.1	130.8	\$48.74	41.8	116.7	\$44.32	40.4	109.8
July.....	46.38	39.3	118.5	49.59	41.3	120.1	41.59	36.6	113.0	49.72	37.8	131.4	48.69	41.5	117.4	42.94	38.2	112.5
August.....	48.69	40.7	119.6	50.23	41.2	121.8	46.41	40.4	114.3	53.94	40.0	134.9	50.65	42.8	118.4	47.06	41.7	113.0
September.....	48.85	40.6	120.3	52.13	41.1	126.9	45.70	38.9	116.7	54.22	39.5	136.3	50.57	42.3	119.6	45.46	39.8	114.3
October.....	49.74	41.0	121.4	51.58	41.6	124.0	46.89	39.7	117.6	55.86	40.4	138.3	52.13	43.3	120.4	47.02	41.1	114.4
November.....	48.06	39.6	121.3	51.45	40.8	126.1	48.87	41.0	118.9	56.22	40.1	140.1	51.50	42.5	121.2	50.16	42.3	118.5
December.....	51.10	41.7	122.5	53.54	42.8	124.9	48.76	40.8	119.2	58.04	40.9	141.8	52.19	42.9	121.6	50.68	42.8	118.3
1947: January.....	49.82	40.5	122.9	51.06	41.8	122.1	48.83	40.2	121.1	59.01	41.3	143.0	52.21	42.7	122.4	48.41	39.9	121.8
February.....	50.40	41.0	123.0	51.21	41.6	123.0	50.46	41.2	122.2	59.78	41.5	144.0	51.99	42.5	122.4	50.95	40.9	124.6
March.....	51.73	41.7	124.0	53.56	42.3	126.8	50.28	40.9	122.7	60.42	41.7	144.8	53.42	43.0	124.3	50.85	41.0	124.2
April.....	51.94	41.7	124.6	52.99	41.5	127.6	50.72	41.4	122.3	59.68	41.3	144.3	52.73	42.5	124.2	51.16	40.9	125.2
May.....	53.07	41.8	126.9	56.06	42.9	130.7	53.51	42.1	126.8	60.22	41.3	145.9	53.37	42.3	126.2	51.75	40.5	127.9
June.....	54.90	42.0	130.6	54.83	42.2	129.1	54.49	41.5	131.1	61.76	40.9	150.5	53.79	42.1	127.8	53.49	41.0	130.5
Iron and steel and their products—Con.																		
	Firearms			Electrical machinery						Machinery, except electrical								
				Total: Electrical machinery			Electrical equipment			Radios and phonographs			Communication equipment			Total: Machinery, except electrical		
1939: Average.....	\$27.28	41.3	Cents 66.0	\$27.09	38.6	70.2	\$27.95	38.7	72.2	\$22.34	38.5	58.1	\$28.74	38.3	75.1	\$29.27	39.3	74.6
1941: January.....	35.09	48.6	72.2	31.84	42.4	75.1	33.18	43.4	76.5	24.08	38.2	63.2	32.47	41.4	78.4	34.36	44.0	78.1
1946: June.....	51.91	41.2	126.1	45.72	39.8	114.8	46.15	39.3	117.3	40.00	38.9	102.9	49.37	42.2	117.1	50.04	40.9	122.3
July.....	51.06	41.0	124.4	45.59	39.4	115.8	46.31	38.9	118.9	40.40	39.1	103.4	47.80	41.1	116.4	49.76	40.4	123.2
August.....	49.86	40.4	123.5	47.49	40.6	116.9	48.28	40.2	120.2	41.54	39.8	104.4	49.71	42.2	118.1	50.99	40.9	124.6
September.....	53.30	42.3	125.9	48.31	40.8	118.5	49.24	40.5	121.4	42.63	40.0	106.6	50.60	42.2	119.9	51.74	41.1	126.0
October.....	51.10	40.7	125.6	48.28	40.7	118.6	48.92	40.3	121.3	42.88	40.1	107.0	51.36	42.7	120.3	52.57	41.5	126.6
November.....	52.89	40.7	130.1	48.33	40.6	119.1	49.12	40.2	122.1	43.42	40.3	107.6	50.48	42.0	120.3	52.06	40.9	127.3
December.....	53.37	40.5	131.8	49.13	41.1	119.5	49.80	40.7	122.4	44.38	40.9	108.6	51.58	42.7	120.8	52.87	41.4	127.7
1947: January.....	54.15	41.3	131.2	48.63	40.5	119.9	49.64	40.3	123.1	42.33	39.4	107.4	51.48	42.5	121.3	53.12	41.4	128.3
February.....	54.33	41.3	131.5	48.13	40.0	120.3	48.98	39.7	123.2	41.72	38.6	108.0	51.59	42.3	122.2	53.22	41.3	129.0
March.....	55.09	41.7	133.5	49.07	40.5	121.0	50.28	40.4	124.4	42.37	39.1	108.2	51.52	42.1	122.6	53.82	41.5	129.8
April.....	54.62	41.1	133.0	48.36	40.0	121.0	50.22	40.2	125.0	42.31	38.9	108.8	47.84	40.5	117.9	54.25	41.5	130.8
May.....	56.38	41.3	136.6	50.24	39.8	126.4	52.65	40.1	131.4	44.57	39.1	113.9	46.52	39.1	118.9	55.22	41.4	133.4
June.....	57.54	41.6	138.3	51.57	39.8	129.5	54.16	40.5	133.5	43.98	38.2	115.1	49.62	38.8	127.7	56.29	41.3	136.2
Machinery, except electrical—Continued																		
	Machinery and machine-shop products			Engines and turbines			Tractors			Agricultural machinery, excluding tractors			Machine tools			Machine-tool accessories ³		
1939: Average.....	\$28.76	39.4	Cents 73.0	\$28.67	37.4	76.7	\$32.13	38.3	83.9	\$26.46	37.0	71.6	\$32.25	42.9	75.2	\$31.78	40.9	77.7
1941: January.....	34.00	43.7	77.7	36.50	44.1	82.7	36.03	41.5	86.8	29.92	39.5	75.7	40.15	50.4	79.7	37.90	50.0	75.8
1946: June.....	49.70	41.2	120.2	52.43	40.0	132.0	50.58	39.1	129.3	47.77	39.6	121.0	53.86	42.2	127.7	56.36	42.3	133.1
July.....	49.49	40.7	121.2	52.86	40.3	131.3	49.73	37.9	131.1	47.55	39.7	119.9	42.44	41.3	126.9	54.63	41.1	133.0
August.....	51.15	41.6	122.8	51.95	39.0	132.8	51.01	39.1	130.3	48.66	39.9	122.4	54.07	42.0	129.1	56.89	41.8	136.1
September.....	51.05	41.2	123.8	55.26	40.5	136.5	51.21	39.3	130.2	50.42	40.4	124.7	54.45	41.9	130.0	58.76	42.5	138.0
October.....	51.91	41.6	124.5	55.38	41.1	136.5	52.28	40.2	130.2	50.34	40.4	124.5	55.61	42.6	130.6	58.70	42.6	137.8
November.....	51.38	41.1	124.9	55.57	40.5	137.0	52.53	40.3	130.4	49.65	39.8	124.8	55.90	42.3	132.2	58.08	42.1	138.0
December.....	52.62	41.8	125.7	56.88	41.5	137.1	51.99	40.1	129.7	49.75	39.8	125.1	56.66	42.8	132.2	59.71	43.2	138.1
1947: January.....	52.78	41.7	126.4	56.08	41.0	136.8	51.96	39.5	131.5	49.84	39.9	125.0	56.17	42.2	132.6	58.43	42.5	137.9
February.....	52.61	41.5	126.7	56.37	41.1	137.2	51.96	39.8	130.5	51.59	40.6	127.2	56.09	42.3	132.5	58.16	41.8	139.2
March.....	53.10	41.6	127.5	56.92	41.2	138.2	52.99	40.3	131.4	51.78	40.1	129.2	56.46	42.3	133.4	58.40	42.1	138.9
April.....	53.31	41.6	127.9	57.27	41.3	139.4	54.73	40.3	135.8	51.93	40.3	128.9	56.06	42.0	133.4	58.66	41.8	140.4
May.....	54.44	41.6	130.7	58.74	41.2	142.8	57.46	40.0	143.3	53.18	40.0	133.0	57.13	42.1	135.7	58.92	41.7	141.4
June.....	55.37	41.6	133.2	60.20	41.2	146.0	57.69	39.4	145.4	55.76	40.8	137.4	58.31	42.2	138.1	59.14	41.6	143.2

See footnotes at end of table.

TABLE C-1: Average Earnings and Hours in Manufacturing and Nonmanufacturing Industries¹—Con.

Year and month	Machinery, except electrical—Continued																	
	Textile machinery			Typewriters			Cash registers, adding and calculating machines			Washing machines, wringers and driers, domestic ²			Sewing machines, domestic and industrial			Refrigerators and refrigeration equipment ³		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
1939: Average.....	\$26.19	39.8	Cents 66.0	\$23.98	37.3	Cents 64.3	\$30.38	37.2	Cents 81.2			Cents			Cents			Cents
1941: January.....	30.13	44.6	67.7	26.40	39.1	67.5	34.78	41.4	84.6									
1946: June.....	46.99	41.9	112.3	45.08	42.3	106.5	56.00	42.0	133.8	\$43.81	40.2	109.0	\$50.40	43.6	116.5	\$46.64	38.6	120.8
July.....	47.42	41.4	114.4	46.49	41.7	111.6	56.29	41.9	134.9	44.99	40.7	110.5	49.58	43.1	115.6	46.77	38.6	121.0
August.....	48.28	41.9	115.2	46.01	41.1	111.9	52.84	39.9	133.8	46.30	41.2	112.4	52.27	42.1	124.8	48.46	39.7	122.2
September.....	49.43	42.6	116.1	47.19	41.7	113.2	57.91	42.6	137.0	47.87	41.7	114.7	51.15	40.4	127.4	49.54	40.1	123.5
October.....	50.26	42.9	117.3	47.89	41.9	114.3	57.34	42.3	136.6	49.60	42.7	116.1	52.63	41.2	128.2	49.71	40.2	123.7
November.....	49.60	41.8	118.6	48.98	42.1	116.5	58.42	41.8	140.6	45.76	39.6	115.5	52.63	40.8	129.1	47.67	38.4	124.1
December.....	52.12	43.5	119.9	47.41	40.6	116.9	56.37	40.7	139.1	48.43	41.5	116.8	54.13	41.7	130.2	47.66	38.1	124.9
1947: January.....	53.15	43.2	122.9	47.56	40.8	116.5	57.14	41.1	139.9	52.31	42.4	122.5	54.02	41.5	130.7	51.59	40.4	126.7
February.....	53.67	43.1	124.5	47.95	40.9	117.1	60.47	42.7	142.7	49.21	40.4	121.8	54.61	41.6	131.5	*48.79	38.2	127.6
March.....	53.86	43.2	124.8	48.13	40.9	117.6	60.68	42.5	143.9	52.31	42.1	124.1	55.28	42.0	132.1	*51.09	40.0	128.1
April.....	53.14	42.5	125.1	49.29	41.2	119.7	61.83	42.4	146.9	53.91	42.8	125.8	54.46	41.2	132.8	53.42	40.7	131.2
May.....	54.05	42.7	127.0	50.75	41.6	121.9	61.68	42.3	146.8	54.89	42.5	129.1	55.00	41.0	134.7	53.19	40.4	131.7
June.....	54.35	42.4	128.7	52.19	42.8	120.9	63.67	41.9	151.0	55.16	41.8	131.8	57.66	41.0	140.7	54.77	40.4	135.6
Transportation equipment, except automobiles																		
	Total: Transportation equipment, except automobiles			Locomotives			Cars, electric and steam-railroad ⁴			Aircraft and parts, excluding aircraft engines			Aircraft engines			Shipbuilding and boatbuilding		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
1939: Average.....	\$30.51	38.9	Cents 78.5	\$28.33	36.7	Cents 77.1	\$26.71	36.0	Cents 74.1	\$30.34	41.5	Cents 74.5	\$36.58	44.1	Cents 83.5	\$31.91	38.0	Cents 83.5
1941: January.....	35.69	43.1	82.8	34.79	42.8	81.4	29.57	38.5	76.8	34.13	44.7	77.6	42.16	47.2	89.2	37.69	42.0	89.3
1946: June.....	53.32	39.5	135.0	58.91	40.5	145.6	49.17	40.8	120.5	52.55	40.4	130.2	55.91	41.6	134.3	53.99	38.1	141.6
July.....	53.70	39.3	136.6	59.18	40.5	146.0	48.21	39.6	121.9	53.01	40.0	132.5	54.72	40.6	134.8	55.20	38.4	143.6
August.....	53.91	39.7	135.9	57.27	39.8	143.9	50.23	41.1	122.3	53.85	40.7	132.3	56.08	41.4	135.4	54.41	38.0	143.1
September.....	52.65	38.8	135.6	57.92	39.6	146.2	49.38	39.9	123.8	53.73	40.6	132.3	56.93	41.9	135.7	50.91	35.7	142.6
October.....	54.32	40.0	135.9	60.63	41.6	145.6	51.75	41.8	123.9	53.81	40.6	132.6	57.31	42.1	136.3	53.96	37.7	143.2
November.....	52.37	38.4	136.4	57.22	39.9	143.3	52.46	41.2	127.2	52.53	39.6	132.6	51.06	37.2	137.3	51.47	35.7	144.1
December.....	55.35	40.6	136.2	59.99	41.5	144.5	52.24	41.5	126.0	53.46	40.4	132.5	56.89	41.9	135.7	57.21	40.0	143.0
1947: January.....	54.48	40.2	135.6	55.64	39.8	139.7	52.17	40.6	128.3	52.59	39.8	132.1	56.15	41.4	135.7	57.05	40.2	142.0
February.....	54.34	39.7	136.7	56.97	40.4	141.1	53.42	41.3	129.2	53.41	40.1	133.2	54.77	40.7	134.4	55.37	38.4	144.2
March.....	54.25	39.8	136.2	51.68	37.4	138.4	53.67	40.8	*131.5	53.22	39.8	133.8	53.02	39.4	134.4	56.59	39.9	141.8
April.....	54.29	39.8	136.3	52.20	37.2	140.2	53.51	40.9	131.0	52.54	39.6	132.6	53.77	39.7	135.3	56.97	39.9	142.6
May.....	55.33	40.2	137.6	59.09	40.2	146.9	54.80	41.4	132.3	52.63	39.5	132.7	54.77	39.6	138.3	57.91	40.4	143.3
June.....	55.60	40.1	138.8	59.10	40.0	147.8	55.76	41.1	135.6	52.59	39.2	134.2	55.44	38.8	142.8	57.80	40.6	142.5
Transportation equipment, except automobiles—Con.																		
	Motorcycles, bicycles, and parts			Automobiles			Total: Nonferrous metals and their products			Smelting and refining, primary, of nonferrous metals			Alloying and rolling and drawing of nonferrous metals except aluminum			Clocks and watches		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
1939: Average.....			Cents	\$32.91	35.4	Cents 92.9	\$26.74	38.9	Cents 68.7	\$26.67	38.2	Cents 69.9	\$28.77	39.6	Cents 72.9	\$22.27	37.9	Cents 58.7
1941: January.....				37.69	38.9	96.9	30.47	41.4	73.6	29.21	38.7	75.5	35.96	44.0	81.8	23.90	38.9	61.4
1946: June.....	\$47.05	39.8	118.2	49.32	36.6	134.7	47.61	40.9	116.3	47.45	40.1	118.2	52.53	41.7	125.8	40.70	40.3	101.1
July.....	44.64	38.2	116.9	51.15	37.8	135.4	46.68	40.0	116.6	47.42	39.9	118.9	50.34	40.2	125.2	40.44	39.8	101.7
August.....	49.30	40.6	121.5	53.80	39.2	137.3	48.00	40.8	117.7	47.85	40.2	118.9	51.59	40.8	126.6	42.75	41.1	103.9
September.....	50.95	41.2	123.8	53.37	38.5	138.5	48.55	40.7	119.2	48.65	40.3	120.8	51.39	40.7	126.4	43.68	41.0	106.4
October.....	53.24	42.6	125.0	53.41	38.8	137.6	48.92	40.9	119.5	47.80	40.0	119.6	51.93	40.7	127.5	44.81	41.6	107.8
November.....	52.39	41.2	127.0	53.83	38.6	139.4	49.24	40.9	120.4	48.25	39.8	121.2	52.21	40.6	128.7	45.46	41.6	109.3
December.....	55.23	43.2	127.8	54.98	39.4	139.5	50.40	41.7	121.0	49.75	41.1	121.5	53.69	41.7	128.6	45.39	41.4	109.6
1947: January.....	50.29	40.5	124.0	54.13	38.9	139.0	49.91	41.0	121.7	49.39	40.4	122.7	53.45	41.3	129.3	43.83	39.7	110.3
February.....	50.40	40.1	125.8	54.29	38.8	139.9	50.12	41.0	122.2	50.04	40.6	123.4	53.92	41.5	130.0	44.88	41.0	109.6
March.....	52.43	41.4	126.7	55.45	39.7	139.6	50.26	41.0	122.6	50.66	40.9	123.9	53.68	41.2	130.2	44.83	40.7	110.1
April.....	52.36	41.3	126.9	54.14	38.5	140.6	50.30	40.8	123.4	51.05	40.8	125.2	53.45	40.9	130.5	44.71	40.4	110.8
May.....	54.60	41.8	130.7	55.96	38.3	146.3	51.15	40.6	126.0	52.87	41.4	127.8	53.01	39.8	133.0	45.07	40.1	112.4
June.....	55.00	41.5	133.5	57.40	38.7	148.4	52.01	40.5	128.5	53.59	41.7	129.5	55.10	39.7	137.9	45.82	40.0	114.5

See footnotes at end of table.

TABLE C-1: Average Earnings and Hours in Manufacturing and Nonmanufacturing Industries¹—Con.

Year and month	Nonferrous metals and their products—Continued												Lumber and timber basic products					
	Jewelry (precious metals) and jewelers' findings			Silverware and plated ware			Lighting equipment			Aluminum manufactures ¹			Total: Lumber and timber basic products			Sawmills and logging camps		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
1939: Average	\$26.36	39.4	<i>Cents</i> 66.0	\$26.03	40.7	<i>Cents</i> 64.3	\$25.73	37.1	<i>Cents</i> 69.3	\$27.49	39.3	<i>Cents</i> 69.9	\$19.06	39.0	<i>Cents</i> 48.9	\$18.29	38.4	<i>Cents</i> 47.6
1941: January	26.43	39.1	66.4	27.37	41.4	66.6	28.19	39.3	71.7	32.85	42.0	78.2	20.27	38.9	52.1	19.59	38.4	51.0
1946: June	47.09	43.3	108.3	51.42	44.8	114.7	45.00	39.2	114.7	46.14	39.5	116.7	37.62	41.5	90.8	36.56	41.1	88.8
July	44.69	42.0	105.7	50.29	43.9	114.6	44.44	38.2	116.3	45.98	39.1	117.6	35.60	39.1	91.0	34.66	38.9	89.2
August	46.72	42.7	108.8	52.67	45.2	116.6	45.40	39.0	116.5	46.73	39.7	117.6	38.78	41.8	92.8	37.75	41.4	91.1
September	48.93	43.5	112.4	55.48	45.9	121.0	46.10	39.1	117.8	47.32	39.5	119.7	38.73	41.4	93.5	37.69	41.2	91.5
October	49.91	43.8	114.6	56.42	46.1	122.2	45.92	39.1	117.5	46.94	39.4	119.2	39.21	41.9	93.6	37.84	41.5	91.3
November	49.31	42.6	114.9	55.70	45.2	123.4	47.13	40.0	117.8	48.15	40.0	120.4	37.74	40.6	93.1	36.37	40.2	90.6
December	51.76	44.6	115.2	58.27	46.8	124.9	46.74	39.5	118.4	48.34	40.6	121.1	38.79	41.7	93.1	37.05	41.1	90.1
1947: January	48.84	42.4	115.7	57.86	46.2	125.4	47.91	39.9	120.0	48.11	40.0	120.4	39.11	40.6	96.2	37.41	40.0	93.5
February	48.37	42.1	115.4	57.34	45.6	125.8	48.92	40.4	121.0	47.60	39.2	121.3	41.18	42.1	97.9	39.89	41.8	95.4
March	48.47	41.7	116.7	58.35	45.7	127.8	47.59	39.4	120.9	48.71	40.1	121.3	40.31	41.0	98.3	39.12	40.6	96.5
April	47.09	41.0	115.9	58.01	45.6	127.5	47.63	39.2	121.5	48.55	39.7	122.1	41.01	41.4	99.0	39.81	40.9	97.2
May	47.52	40.5	118.0	58.50	45.8	127.8	50.87	39.5	128.2	48.52	39.2	124.2	42.94	41.9	102.5	41.80	41.5	100.6
June	47.34	40.7	117.6	58.97	45.7	129.2	50.44	38.7	130.5	49.20	39.0	126.7	44.97	42.6	105.6	44.01	42.2	104.2
Lumber and timber basic products—Con.																		
Planing and plywood mills			Total: Furniture and finished lumber products			Furniture			Caskets and other morticians' goods			Wood preserving			Total: Stone, clay, and glass products			
1939: Average	\$22.17	41.1	<i>Cents</i> 54.0	\$19.95	38.5	<i>Cents</i> 51.8	\$20.51	38.9	<i>Cents</i> 53.0			<i>Cents</i>			<i>Cents</i>	\$23.94	37.6	<i>Cents</i> 63.7
1941: January	22.51	40.5	55.4	20.90	38.7	54.0	21.42	39.0	55.2							25.02	37.4	66.9
1946: June	41.11	42.5	96.8	38.73	41.8	92.7	39.31	41.4	95.0	\$41.69	42.9	96.9	\$35.91	41.9	85.7	42.01	40.4	104.1
July	38.71	40.0	96.5	38.37	41.0	93.7	38.80	40.6	95.7	40.23	41.5	96.4	36.15	40.9	88.4	41.80	39.5	105.7
August	42.17	42.9	98.2	40.09	41.9	95.7	40.85	41.7	98.2	40.74	42.0	96.6	36.84	41.2	89.4	43.23	40.7	106.3
September	42.04	42.2	99.5	40.86	41.8	97.7	41.62	41.6	100.2	42.74	42.8	100.2	38.01	41.5	91.7	44.03	40.5	108.7
October	43.49	43.2	100.5	41.73	42.2	99.0	42.42	41.8	101.4	42.66	42.5	100.3	38.24	41.6	91.9	44.46	40.6	109.6
November	41.86	41.8	100.4	41.62	41.7	99.9	42.41	41.4	102.4	43.14	41.5	103.5	38.90	41.8	93.1	44.91	40.3	111.4
December	44.12	43.4	101.4	42.49	42.2	100.7	43.04	41.6	103.4	45.02	43.2	103.7	38.66	42.0	92.1	45.89	41.0	111.9
1947: January	44.11	42.5	103.9	42.41	41.8	101.5	43.35	41.5	104.6	45.02	42.7	105.2	37.55	40.4	92.2	45.58	40.5	112.5
February	45.13	42.9	104.9	42.80	41.9	102.2	44.20	42.0	104.9	44.79	42.1	106.0	38.49	40.9	94.0	45.49	40.1	113.3
March	45.10	42.8	105.4	43.00	41.7	103.1	44.33	41.9	105.9	45.67	42.3	107.7	38.90	40.8	95.3	46.38	40.5	114.4
April	45.90	43.3	105.9	42.87	41.5	103.2	43.99	41.4	106.4	45.49	42.1	107.7	39.78	41.4	96.0	46.49	40.5	114.9
May	47.65	43.5	109.7	43.49	41.5	104.7	44.29	41.2	107.5	46.88	42.2	110.8	41.58	42.8	96.7	47.20	40.2	117.3
June	48.96	44.2	110.7	44.25	41.7	106.2	45.17	41.4	108.6	46.99	42.0	111.1	40.87	41.5	98.3	48.56	40.8	119.1
Stone, clay, and glass products—Continued																		
Glass and glassware			Glass products made from purchased glass			Cement			Brick, tile, and terra cotta			Pottery and related products			Gypsum			
1939: Average	\$25.32	35.2	<i>Cents</i> 72.1			<i>Cents</i>	\$26.67	38.2	<i>Cents</i> 69.9	\$20.55	37.8	<i>Cents</i> 54.3	\$22.74	37.2	<i>Cents</i> 62.5			<i>Cents</i>
1941: January	28.02	36.3	77.2				26.82	37.9	70.9	21.74	36.9	58.7	22.92	36.4	63.5			
1946: June	42.16	38.7	108.9	\$38.22	41.2	91.4	43.10	41.4	104.2	39.05	40.0	97.9	40.69	39.5	104.0	\$48.02	47.2	101.6
July	41.87	38.0	110.2	37.33	40.4	90.2	44.66	41.7	107.2	39.44	39.8	99.1	38.84	36.5	106.8	46.40	44.3	104.8
August	43.14	39.4	109.5	39.60	42.1	91.7	45.63	42.3	107.9	40.67	40.0	101.2	41.34	38.5	107.9	50.45	47.2	106.9
September	45.29	39.5	114.7	38.88	40.5	93.8	47.03	42.9	109.7	41.28	40.3	102.0	41.33	38.2	108.6	50.46	46.6	108.4
October	45.71	39.4	116.1	40.29	40.9	96.4	46.02	42.4	108.5	42.25	40.9	102.7	41.89	38.4	109.6	52.04	47.8	108.8
November	46.72	39.2	119.4	41.35	41.2	97.7	46.18	42.2	109.5	42.08	40.3	103.5	41.56	37.9	110.0	50.89	46.2	110.2
December	47.96	39.9	120.3	42.53	42.0	99.8	46.12	42.4	109.0	42.57	40.7	104.0	42.82	38.6	111.0	51.39	46.8	109.9
1947: January	47.78	39.4	121.4	42.36	42.0	99.3	43.79	40.6	107.9	42.22	40.3	104.1	41.97	37.7	112.1	51.49	46.2	111.4
February	46.85	38.6	121.6	*41.58	41.7	*100.0	44.67	41.5	107.7	42.35	40.0	105.6	42.69	37.2	114.9	51.14	45.9	111.4
March	48.45	39.6	122.6	*40.75	41.1	*99.1	45.12	41.6	108.5	42.78	40.1	106.3	44.26	38.3	115.7	51.95	46.3	112.2
April	48.88	39.7	123.2	40.69	40.6	100.2	45.82	42.1	108.9	42.58	39.7	106.2	44.42	38.9	115.2	50.45	45.2	111.6
May	48.66	39.3	123.9	41.94	40.8	102.8	44.22	39.0	113.3	45.77	40.6	112.3	45.45	38.9	117.1	52.05	45.8	113.5
June	50.42	40.0	126.4	43.07	40.8	105.1	51.59	42.4	120.8	45.60	41.1	111.0	45.87	38.7	119.0	52.38	44.8	115.9

See footnotes at end of table.

TABLE C-1: Average Earnings and Hours in Manufacturing and Nonmanufacturing Industries¹—Con.

Year and month	Stone, clay, and glass products—Continued												Textile-mill products and other fiber manufactures					
	Lime			Marble, granite, slate, and other products			Abrasive			Asbestos products			Total: Textile-mill products and other fiber manufactures			Cotton manufactures, except smallwares		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
	Cents			Cents			Cents			Cents			Cents			Cents		
1939: Average.....				\$26.18	36.9	71.4				\$24.43	39.0	62.7	\$16.84	36.6	46.0	\$14.26	36.7	38.9
1941: January.....				24.29	34.6	70.8				27.26	41.3	66.0	18.01	36.9	48.8	15.60	37.2	41.9
1946: June.....	\$42.06	45.2	91.6	42.51	42.3	100.0	\$46.78	40.3	116.1	48.18	42.8	112.5	35.02	40.0	87.5	31.75	39.5	80.3
July.....	42.11	44.9	93.2	42.44	41.9	100.4	47.02	39.9	117.9	48.70	42.9	113.6	34.76	39.6	87.7	31.64	39.4	80.3
August.....	45.27	46.6	96.7	43.68	43.0	101.0	46.63	39.9	116.8	49.56	43.5	113.9	37.00	40.1	92.4	34.81	39.8	87.5
September.....	45.66	46.9	97.4	42.64	41.5	102.2	45.35	38.0	119.4	49.19	42.9	114.5	37.54	40.0	94.0	35.35	39.8	88.8
October.....	45.12	46.6	96.6	44.18	42.9	102.6	45.11	38.1	118.5	49.86	42.0	118.7	38.09	40.2	94.8	35.57	39.9	89.2
November.....	45.69	46.2	98.8	42.76	41.6	103.4	48.45	39.9	121.4	50.18	41.9	119.8	38.38	40.2	95.5	36.14	40.3	89.8
December.....	46.06	46.7	98.2	44.26	42.4	104.9	50.38	41.6	121.2	50.79	42.7	118.8	39.26	40.9	95.9	36.85	40.9	90.0
1947: January.....	43.83	44.7	98.3	43.88	42.1	104.5	52.70	43.2	122.0	51.91	43.2	120.2	39.29	40.5	97.0	37.06	40.6	91.4
February.....	44.80	45.3	98.1	44.18	41.9	105.6	49.46	40.7	121.6	52.73	43.9	120.1	40.32	40.4	99.7	37.56	40.5	92.7
March.....	45.70	46.2	98.6	45.30	42.0	107.5	50.63	40.4	125.4	53.03	43.8	121.0	41.01	40.0	102.4	39.22	40.1	97.9
April.....	46.53	46.6	99.4	45.51	42.1	107.9	49.72	39.7	125.3	52.46	42.8	122.5	40.12	39.1	102.7	38.53	39.3	98.1
May.....	45.95	44.7	101.7	46.20	42.7	107.5	50.10	39.6	126.4	52.58	42.6	123.5	39.89	38.9	102.5	37.73	38.8	97.4
June.....	47.33	44.8	104.5	45.87	41.9	107.5	48.66	39.1	124.4	54.51	43.0	127.1	39.54	38.6	102.4	37.10	38.3	97.0
Textile-mill products and other fiber manufactures—Continued																		
	Cotton smallwares			Silk and rayon goods			Woolen and worsted manufactures, except dyeing and finishing			Hosiery			Knitted cloth			Knitted outerwear and knitted gloves		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
	Cents			Cents			Cents			Cents			Cents			Cents		
	Cents			Cents			Cents			Cents			Cents			Cents		
1939: Average.....	\$18.22	39.0	47.4	\$15.78	36.5	42.9	\$19.21	36.4	52.8	\$18.98	35.6	53.6	\$18.15	38.4	46.8	\$17.14	37.0	46.1
1941: January.....	19.74	39.3	50.3	16.53	35.7	46.1	21.78	37.9	57.6	18.51	33.8	55.0	19.90	37.9	50.3	17.65	35.8	48.9
1946: June.....	36.41	40.8	89.3	34.64	40.8	85.0	41.63	41.1	101.4	33.89	38.1	88.9	39.41	43.1	90.9	35.31	39.6	87.9
July.....	37.44	41.2	90.9	34.94	40.7	85.8	41.18	40.5	101.7	33.47	37.2	89.9	38.98	42.3	92.3	33.73	38.6	87.0
August.....	38.67	41.0	94.2	37.42	41.3	90.6	41.88	40.9	102.4	35.96	38.1	94.6	39.20	42.2	92.9	34.35	38.6	88.1
September.....	38.33	40.5	94.7	37.20	40.4	92.2	42.44	41.1	103.4	36.65	37.7	97.4	39.85	41.9	95.1	35.84	38.6	91.8
October.....	39.00	40.6	96.1	38.67	41.6	93.1	42.40	40.9	103.7	37.65	38.3	98.2	39.94	41.7	95.7	36.69	39.4	92.2
November.....	38.09	39.7	96.1	38.69	41.1	94.1	41.67	40.1	103.8	38.20	38.4	99.5	39.99	40.9	96.7	37.14	39.5	93.0
December.....	39.64	41.0	96.7	39.57	41.8	94.4	42.96	41.3	103.9	39.05	38.8	100.6	39.26	40.2	97.2	36.74	39.2	92.8
1947: January.....	40.48	41.0	98.7	40.21	41.1	97.5	43.10	41.3	104.5	38.35	38.1	100.7	39.03	40.9	95.4	36.49	38.4	94.4
February.....	40.59	40.5	100.4	41.45	41.6	99.6	47.44	41.0	115.6	38.40	38.1	100.9	40.89	41.3	98.9	36.68	38.4	94.8
March.....	40.69	40.4	100.8	41.94	41.5	101.2	46.28	40.1	115.5	38.41	37.8	101.6	41.00	41.6	98.6	36.75	38.5	94.7
April.....	40.11	39.5	101.7	40.89	40.2	101.6	45.26	39.1	115.9	36.35	35.9	101.0	39.49	39.9	98.9	35.58	37.3	95.2
May.....	40.08	39.4	101.9	41.73	41.0	101.9	45.28	39.2	115.8	36.42	35.9	101.4	40.06	40.3	98.5	35.51	37.6	93.9
June.....	39.27	38.6	101.8	41.08	40.3	101.5	45.75	39.4	116.0	35.42	35.2	100.5	40.32	40.3	98.2	35.11	37.0	94.1
Textile-mill products and other fiber manufactures—Continued																		
	Knitted underwear			Dyeing and finishing textiles, including woolen and worsted			Carpets and rugs, wool			Hats, fur-felt			Jute goods, except felts			Cordage and twine		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
	Cents			Cents			Cents			Cents			Cents			Cents		
	Cents			Cents			Cents			Cents			Cents			Cents		
1939: Average.....	\$15.05	36.9	41.0	\$20.82	38.6	53.5	\$23.25	36.1	64.4	\$22.73	32.2	70.7						
1941: January.....	16.06	36.0	44.6	21.65	39.3	55.1	25.18	37.3	67.5	27.12	36.2	75.5						
1946: June.....	30.60	38.4	79.2	40.64	42.9	94.8	41.64	40.8	102.4	49.57	40.8	121.4	\$36.47	43.9	84.4	\$34.68	40.8	84.8
July.....	31.00	38.1	81.0	39.66	41.9	94.5	41.03	40.0	102.7	48.38	39.3	123.3	36.39	42.2	87.8	34.43	40.2	85.6
August.....	31.79	38.1	83.0	40.92	42.1	97.1	42.10	40.4	104.3	52.93	39.7	135.2	38.23	43.4	89.7	37.17	41.3	90.1
September.....	32.70	38.1	85.2	40.72	41.4	98.3	43.72	41.3	106.1	53.25	40.9	130.0	39.47	44.0	91.2	37.86	41.4	91.4
October.....	33.05	38.4	85.5	42.69	42.3	100.8	46.01	41.1	112.2	52.92	40.6	130.2	39.52	43.7	91.8	37.63	40.9	92.2
November.....	33.31	38.7	85.9	43.54	42.2	103.3	46.83	41.2	113.9	52.83	40.2	130.9	39.68	43.8	92.0	37.94	40.3	94.3
December.....	34.26	39.3	86.8	45.38	43.6	104.2	47.86	41.8	114.7	53.70	41.3	129.9	40.57	44.4	92.9	39.08	41.4	94.4
1947: January.....	33.70	38.7	86.9	45.67	43.3	105.5	46.51	40.7	114.5	50.15	39.1	127.7	40.09	43.9	92.8	39.14	41.1	95.1
February.....	34.22	38.8	88.1	45.75	42.9	106.5	46.51	40.5	114.9	49.60	38.9	127.2	41.74	43.4	97.9	39.51	41.0	96.4
March.....	34.86	38.7	89.9	46.12	42.6	108.3	47.12	40.8	115.8	49.22	38.0	129.7	41.57	43.2	97.9	40.00	40.6	98.4
April.....	34.22	38.3	89.1	45.95	41.3	111.4	47.69	40.4	118.1	47.28	36.3	120.0	40.98	42.7	97.7	40.23	40.5	99.2
May.....	35.18	39.0	90.4	45.62	41.1	110.8	48.30	41.2	117.5	46.81	36.4	128.9	42.12	43.4	98.5	39.11	39.2	99.6
June.....	34.85	38.8	90.1	46.13	41.6	110.9	49.02	41.3	118.8	48.88	37.5	131.1	41.13	43.0	97.4	38.26	37.9	101.2

See footnotes at end of table.

TABLE C-1: Average Earnings and Hours in Manufacturing and Nonmanufacturing Industries¹—Con.

Year and month	Apparel and other finished textile products																	
	Total: Apparel and other finished textile products			Men's clothing, not elsewhere classified			Shirts, collars, and nightwear			Underwear and neckwear, men's			Work shirts			Women's clothing, not elsewhere classified		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
1939: Average.....	\$18.17	34.5	52.7	\$19.32	33.2	58.1	\$13.75	34.6	39.8	\$14.18	35.4	40.1	\$11.03	35.8	30.9	\$19.20	33.9	51.9
1941: January.....	18.76	33.5	56.0	20.40	33.4	60.7	14.22	33.0	43.1	14.85	33.6	44.2	12.33	33.6	36.7	19.47	33.2	55.3
1946: June.....	35.23	37.1	95.1	38.18	38.1	99.9	28.73	37.1	77.0	30.56	36.4	83.9	22.62	35.2	64.2	44.02	36.1	119.1
July.....	33.83	36.0	94.1	35.84	36.2	98.5	27.90	36.1	76.9	29.90	36.4	82.2	22.30	34.4	64.8	42.67	35.4	118.0
August.....	36.48	37.0	98.6	38.11	37.5	100.9	28.76	36.8	78.2	31.53	37.5	84.0	23.48	35.7	65.8	47.45	36.4	126.3
September.....	37.25	36.9	101.0	39.14	37.7	102.7	29.62	37.0	79.9	33.13	37.9	87.5	23.55	34.5	68.2	47.82	35.8	130.0
October.....	36.68	36.8	99.7	38.89	37.7	102.4	30.39	37.4	80.9	33.32	37.5	88.9	24.00	34.8	69.0	46.25	35.5	126.6
November.....	36.54	36.6	99.8	41.39	37.8	108.6	32.04	37.6	84.7	34.78	38.6	90.1	26.01	36.6	71.2	43.28	34.9	121.1
December.....	37.23	37.0	100.6	41.78	38.1	108.9	33.22	38.1	86.8	33.68	36.9	91.3	26.72	36.9	72.4	44.14	35.3	122.3
1947: January.....	38.22	36.9	103.7	41.70	37.8	109.5	32.17	37.1	86.9	33.37	36.7	90.8	25.43	34.7	73.1	47.30	35.7	129.7
February.....	38.74	36.9	104.9	41.86	37.8	109.7	32.32	37.2	86.9	33.49	36.6	91.5	25.69	35.8	71.6	48.77	36.2	131.4
March.....	38.41	36.7	104.5	41.69	37.6	110.6	32.11	37.0	86.9	34.35	36.5	94.0	25.37	34.3	73.3	47.75	36.1	129.3
April.....	35.44	35.5	99.9	40.45	36.7	109.4	31.62	36.5	86.8	32.18	34.3	93.7	25.09	34.2	72.8	42.32	34.4	120.0
May.....	35.36	35.8	98.8	41.18	37.2	110.5	32.01	36.9	86.7	32.42	35.1	92.7	25.30	34.3	73.5	41.33	34.7	116.5
June.....	35.77	36.0	99.4	40.97	37.2	110.3	31.37	36.9	85.6	33.25	36.4	91.4	25.07	34.2	73.0	41.87	35.0	117.9
Apparel and other finished textile products—Continued																		
	Corsets and allied garments ²			Millinery			Handkerchiefs			Curtains, draperies, and bedspreads			Housefurnishings, other than curtains, etc.			Textile bags ³		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
1939: Average.....	\$17.15	37.5	45.6	\$22.19	33.8	63.6												
1941: January.....	17.24	35.6	48.2	22.31	30.5	64.8												
1946: June.....	33.67	38.7	87.4	42.37	34.4	118.8	\$27.26	36.0	75.8	\$28.45	37.3	76.6	\$31.04	36.5	86.8	\$32.03	39.5	81.0
July.....	32.68	37.8	86.7	47.58	36.7	123.5	26.43	34.7	76.4	27.64	36.1	77.0	34.12	38.2	88.9	30.06	37.1	80.6
August.....	32.99	38.3	85.8	46.04	37.2	125.4	28.61	36.4	78.9	27.58	35.5	78.4	35.38	38.7	91.1	31.53	37.6	83.1
September.....	33.72	38.2	88.5	50.81	37.3	129.2	28.36	35.0	81.2	28.31	35.8	79.9	36.36	38.9	93.6	32.48	38.5	84.8
October.....	35.02	38.7	90.7	47.73	36.4	127.3	29.44	36.0	81.9	29.45	36.5	81.7	33.06	36.4	90.3	33.02	39.0	85.2
November.....	35.29	38.4	91.9	39.98	32.3	119.6	30.89	37.0	83.7	29.52	36.1	82.3	35.91	39.4	90.5	33.29	38.6	86.0
December.....	35.39	38.6	91.7	42.91	34.5	119.5	31.83	38.2	83.6	28.88	35.0	82.8	35.85	39.5	90.5	34.78	39.7	86.5
1947: January.....	35.21	37.8	93.0	48.40	36.6	125.6	28.95	35.3	82.1	28.57	34.6	82.5	34.85	38.1	91.0	35.92	39.7	89.1
February.....	36.04	38.8	93.0	53.73	38.9	131.7	30.60	36.5	84.1	28.51	33.8	84.5	34.91	37.5	92.6	35.13	39.0	88.4
March.....	36.05	38.7	93.3	51.76	37.5	131.8	31.03	36.5	85.4	28.72	33.8	84.9	34.97	37.2	93.5	34.60	38.2	89.5
April.....	35.95	38.3	94.0	42.94	33.6	124.1	29.36	34.2	85.7	26.90	31.5	84.8	35.67	37.6	94.4	35.26	38.6	90.8
May.....	36.11	38.6	93.7	40.54	32.4	121.6	31.24	36.4	85.8	27.55	32.5	84.7	37.36	37.9	98.1	34.06	37.0	90.6
June.....	36.60	38.4	95.6	43.65	32.5	127.3	30.14	35.0	85.6	26.72	31.4	84.9	37.87	38.1	98.9	34.56	37.1	91.8
Leather and leather products																		
	Total: Leather and leather products			Leather			Boot and shoe cut stock and findings			Boots and shoes			Leather gloves and mittens			Trunks and suitcases		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
1939: Average.....	\$19.13	36.2	52.8	\$24.43	38.7	63.4				\$17.83	35.7	50.3						
1941: January.....	20.66	37.3	55.4	25.27	38.3	66.2				19.58	37.0	53.0						
1946: June.....	37.34	39.3	95.0	44.51	40.6	109.3	\$36.24	40.3	90.5	36.14	39.0	92.3	\$32.26	36.5	88.6	\$39.04	39.7	97.5
July.....	36.46	38.2	95.4	44.08	40.1	110.2	35.86	39.8	90.4	35.38	37.8	92.7	32.14	36.5	88.3	36.67	37.1	98.3
August.....	36.74	37.8	97.2	45.08	40.3	112.0	37.69	40.2	94.0	35.17	36.9	94.5	32.33	36.7	88.3	38.96	39.5	98.3
September.....	37.49	38.2	98.2	44.60	39.5	112.9	36.48	39.0	93.8	36.18	37.9	95.5	33.68	37.0	91.9	39.56	39.3	100.2
October.....	37.07	37.5	98.7	44.78	39.7	112.9	36.24	38.7	93.6	35.65	36.9	96.0	33.48	36.9	91.5	40.85	40.0	102.0
November.....	37.24	37.1	100.4	45.98	40.2	114.4	35.78	37.4	96.1	35.76	36.3	97.8	32.69	35.7	92.3	40.63	39.7	102.0
December.....	39.83	39.1	101.8	47.71	41.6	115.0	37.32	38.7	97.0	38.65	38.8	99.5	32.16	35.5	91.0	41.70	40.1	103.4
1947: January.....	40.18	39.3	102.3	48.49	41.3	117.4	37.84	38.8	98.0	39.05	39.1	99.5	32.10	35.0	92.2	40.36	38.7	104.0
February.....	40.29	39.5	102.1	49.65	41.6	119.3	37.79	38.8	98.4	38.96	39.2	98.9	31.38	35.1	89.6	41.60	39.9	103.8
March.....	40.11	39.0	102.8	49.88	41.4	120.4	37.87	38.1	99.9	38.91	38.8	99.9	31.52	35.0	90.0	40.87	39.5	103.6
April.....	39.44	38.3	102.9	49.14	40.7	120.4	37.07	37.8	99.4	37.96	38.0	99.8	31.17	35.0	89.0	41.22	39.1	105.3
May.....	39.50	38.2	103.3	49.65	40.7	122.0	37.32	37.7	100.6	37.86	37.9	99.8	31.22	34.6	90.4	40.35	38.5	104.6
June.....	40.09	38.1	105.2	50.44	40.5	124.1	38.62	38.1	102.5	38.41	37.7	101.8	31.42	35.0	90.8	42.21	39.6	106.3

See footnotes at end of table.

TABLE C-1: Average Earnings and Hours in Manufacturing and Nonmanufacturing Industries¹—Con.

Year and month	Food																	
	Total: Food			Slaughtering and meat packing			Butter ²			Condensed and evaporated milk			Ice cream			Flour		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
1939: Average	\$24.43	40.3	60.7	\$27.55	40.6	68.6	\$22.60	46.7	88.4				\$29.24	46.2	62.6	\$25.80	42.3	60.5
1941: January	24.69	39.0	63.3	26.84	39.3	68.1	22.84	44.6	80.9				29.41	44.2	65.3	25.27	41.0	60.8
1946: June	41.09	42.3	97.2	43.05	39.3	109.5	39.65	47.0	83.1	\$44.19	49.9	88.5	44.06	47.4	90.6	44.33	46.6	95.2
July	43.22	43.8	98.6	48.05	43.0	111.5	40.71	47.4	85.6	43.48	48.8	89.1	45.67	48.3	92.3	48.63	48.8	99.7
August	44.34	43.7	101.5	48.37	43.4	111.6	40.67	46.4	87.5	43.55	48.0	90.8	45.71	47.6	93.5	50.37	49.3	102.4
September	43.59	43.0	101.3	41.11	35.9	114.4	41.38	46.7	88.2	43.95	47.6	92.4	46.48	46.8	95.6	52.21	49.1	106.4
October	43.85	42.4	103.5	43.06	37.5	114.7	41.39	46.5	89.2	43.41	46.7	92.9	47.54	47.6	96.8	52.45	48.8	107.6
November	44.84	42.9	104.6	51.15	44.9	113.7	40.09	44.7	89.5	43.16	46.3	93.3	46.86	46.0	97.6	51.77	48.2	107.5
December	46.93	44.4	105.8	51.73	46.4	111.9	42.29	46.9	90.7	44.50	46.5	95.7	48.84	46.6	100.4	54.61	50.3	108.7
1947: January	47.31	43.6	108.4	57.20	47.5	120.6	42.24	46.2	91.7	46.32	46.6	99.5	48.79	46.8	100.5	55.18	49.9	110.6
February	46.40	42.7	108.8	52.82	44.3	119.3	42.44	45.8	92.6	46.64	46.2	101.0	48.04	46.2	99.7	53.08	48.9	108.7
March	46.05	42.3	108.8	49.87	41.9	119.1	43.00	45.5	93.5	47.04	46.2	101.9	47.58	45.7	100.8	53.77	49.3	109.3
April	46.20	42.1	109.7	50.22	41.8	120.4	43.47	46.8	93.2	48.16	46.8	103.0	47.32	46.0	100.2	52.44	47.5	110.5
May	47.71	43.0	111.0	53.37	44.0	121.4	44.14	46.8	94.2	49.52	48.3	102.6	47.36	45.8	100.9	51.77	47.9	108.9
June	48.87	43.4	112.7	54.40	44.5	122.2	46.10	48.0	95.5	50.57	48.7	103.9	48.78	46.4	102.5	55.82	50.0	111.8
Food—Continued																		
Year and month	Cereal preparations			Baking			Sugar refining, cane			Sugar, beet			Confectionery ²			Beverages, non-alcoholic		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
1939: Average	\$25.70	41.7	62.1	\$23.91	37.6	63.6	\$24.68	42.9	58.5	\$18.64	38.1	49.2	\$24.21	43.6	55.6			
1941: January	26.46	41.1	64.4	22.73	35.0	65.0	24.03	36.5	63.0	12.19	37.6	51.1	25.28	42.0	60.2			
1946: June	\$45.52	42.8	106.4	41.42	43.9	94.5	38.59	39.4	97.9	38.39	37.4	102.5	34.85	39.5	86.0	38.73	43.6	88.3
July	43.85	41.5	105.8	43.81	44.8	98.0	39.97	39.3	101.8	40.67	37.3	109.1	33.76	38.6	85.4	40.52	44.7	90.2
August	46.27	42.7	108.3	44.63	45.0	99.4	39.27	39.1	100.4	40.76	38.3	106.5	35.13	39.7	86.6	40.45	44.2	91.1
September	47.15	42.4	111.2	44.60	44.5	100.3	38.35	37.9	101.2	48.87	42.8	114.1	36.14	40.0	87.3	39.87	43.9	90.4
October	48.28	42.0	114.9	45.45	43.6	104.2	37.40	37.4	100.1	40.86	40.5	100.9	35.04	39.5	87.4	39.30	42.4	91.8
November	47.12	40.7	115.7	46.01	44.0	104.5	40.07	40.8	98.2	49.59	48.6	102.1	36.79	39.8	90.5	39.66	42.4	92.8
December	47.81	40.9	117.0	47.55	45.3	105.1	45.62	44.6	102.4	54.35	52.1	104.4	38.19	41.4	90.2	41.37	43.2	94.9
1947: January	48.48	40.5	119.6	46.32	43.9	105.6	38.83	38.8	100.1	44.34	40.5	109.5	37.06	39.8	93.0	41.13	42.7	95.9
February	49.13	41.5	118.4	45.80	43.2	106.0	41.53	39.5	105.2	47.29	40.5	116.9	37.75	39.9	94.9	40.85	42.3	96.5
March	50.03	41.4	120.8	45.17	43.0	105.7	44.40	41.6	106.7	44.79	37.4	119.9	37.87	39.8	95.1	41.25	42.0	97.4
April	48.26	39.6	121.8	45.26	42.5	106.5	47.92	43.7	109.7	44.46	38.6	115.1	37.60	38.9	96.7	42.50	43.1	98.3
May	49.77	40.4	123.2	46.55	43.1	108.3	44.30	41.2	107.4	43.41	38.6	112.5	38.77	39.8	97.6	43.10	43.6	98.5
June	50.79	40.8	124.4	47.22	43.2	109.4	52.09	46.1	113.0	47.38	40.4	116.2	39.23	39.3	100.6	44.56	44.1	100.2
Food—Continued																		
Year and month	Malt liquors			Canning and preserving			Total: Tobacco manufactures			Cigarettes			Cigars			Tobacco (chewing and smoking) and snuff		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
1939: Average	\$35.01	38.3	91.6	\$16.77	37.0	46.4	\$16.84	35.4	47.6	\$20.88	37.2	56.1	\$14.59	34.7	41.9	\$17.53	34.1	51.4
1941: January	34.57	36.4	95.2	16.67	33.0	51.0	17.89	35.7	50.1	22.38	37.3	60.0	15.13	35.0	43.2	18.60	34.9	53.7
1946: June	52.27	41.3	126.6	35.78	40.0	89.8	33.83	40.0	84.6	37.78	41.4	91.2	31.25	39.2	79.6	29.86	37.8	79.0
July	54.21	42.0	129.1	38.89	43.2	90.4	33.24	39.1	85.1	36.66	40.1	91.5	31.05	38.6	80.3	29.45	37.1	79.4
August	56.36	42.5	132.4	41.12	42.3	97.6	34.16	38.6	88.5	37.93	38.9	97.5	31.50	38.6	81.4	31.28	37.4	83.7
September	57.45	42.7	134.4	41.50	43.5	96.0	35.25	39.5	89.3	39.25	40.3	97.4	32.69	39.0	83.4	31.87	38.0	83.9
October	56.57	42.5	133.0	40.82	41.7	98.3	36.47	40.3	90.5	41.08	41.6	98.8	33.48	39.6	84.4	32.66	38.7	84.4
November	56.68	42.5	133.3	35.28	37.3	95.0	36.66	39.7	92.4	41.74	41.1	101.5	33.27	38.6	85.7	33.58	39.2	85.7
December	59.74	43.7	136.7	37.93	38.8	98.2	38.12	40.2	94.7	43.03	40.9	105.3	34.85	39.9	87.1	34.25	39.1	87.7
1947: January	57.23	41.9	136.6	36.55	37.6	97.5	36.74	39.2	93.8	41.36	39.7	104.1	33.80	39.0	86.2	33.16	37.6	88.3
February	56.88	41.3	137.5	36.82	37.0	99.7	35.44	37.8	93.7	40.76	39.1	104.3	31.98	37.2	85.6	32.03	36.0	88.9
March	57.83	41.8	138.1	37.40	37.7	99.5	35.21	37.5	93.9	40.23	38.7	103.9	31.72	36.7	85.9	32.79	36.3	90.3
April	59.30	42.7	138.7	38.50	38.0	101.8	34.84	36.7	94.8	38.78	36.8	105.4	31.69	36.6	86.0	33.86	37.4	90.7
May	61.55	43.8	140.3	39.39	38.3	103.4	34.46	36.3	94.8	38.33	36.1	106.1	32.03	37.4	85.3	29.72	31.6	94.0
June	64.77	44.5	144.8	39.37	37.8	104.5	36.30	38.2	94.9	41.67	39.4	105.7	32.14	37.4	85.3	34.49	36.9	93.7

See footnotes at end of table.

TABLE C-1: Average Earnings and Hours in Manufacturing and Nonmanufacturing Industries¹—Con.

Year and month	Paper and allied products															Printing, publishing, and allied industries		
	Total: Paper and allied products			Paper and pulp			Envelopes ²			Paper bags			Paper boxes			Total: Printing, publishing, and allied industries		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
1939: Average	\$23.72	40.1	59.2	\$24.92	40.3	62.0							\$21.78	40.2	54.7	\$32.42	37.4	86.6
1941: January	25.16	40.0	62.9	27.02	40.8	66.2							22.26	38.8	57.6	33.49	37.8	88.6
1946: June	42.74	43.0	99.3	45.34	43.7	103.8	\$41.82	43.1	96.9	\$36.54	40.9	89.7	39.94	42.4	94.4	51.73	40.5	127.8
July	43.12	42.8	100.7	46.06	43.8	105.3	40.61	42.5	95.6	37.42	41.3	91.1	39.93	41.9	95.3	51.79	40.2	128.7
August	44.26	43.4	102.0	47.56	44.4	107.0	41.61	42.7	97.5	37.17	40.9	91.1	41.21	42.6	96.8	53.01	40.8	129.9
September	44.57	43.0	103.7	47.55	43.8	108.5	41.60	42.6	97.6	37.89	40.9	93.1	41.53	42.2	98.5	53.96	41.0	131.5
October	45.61	43.4	105.0	49.05	44.5	110.2	42.15	42.6	98.1	38.98	40.8	96.0	42.02	42.5	99.0	54.28	41.0	132.5
November	46.08	43.3	106.4	49.37	44.4	111.1	43.98	42.6	103.1	38.78	40.1	97.0	42.74	42.4	100.9	55.11	41.0	134.3
December	46.87	43.7	107.1	49.92	44.6	111.9	44.51	43.0	103.5	39.96	40.7	98.3	43.61	43.2	101.2	57.03	41.5	137.4
1947: January	47.05	43.2	108.8	50.18	44.2	113.4	44.68	42.8	104.3	40.52	40.2	100.9	43.58	42.3	103.0	56.60	41.0	138.1
February	47.42	43.2	109.8	50.98	44.3	114.9	44.43	42.6	105.6	39.93	39.9	100.1	43.58	42.0	103.9	56.74	40.1	141.5
March	47.92	43.2	110.9	51.27	44.3	115.7	44.69	42.7	106.4	40.43	40.3	100.6	44.10	42.1	105.5	58.19	40.3	144.3
April	48.20	43.0	112.1	52.07	44.4	117.3	44.94	42.8	106.3	39.69	39.5	100.7	43.98	41.5	106.0	58.69	40.1	146.2
May	48.97	43.1	113.5	52.82	44.7	118.4	45.25	43.0	106.5	40.42	39.1	103.6	44.30	41.2	107.7	59.60	40.1	148.7
June	50.07	42.9	116.7	54.79	44.5	123.1	46.13	43.0	108.2	41.69	39.6	105.4	44.87	41.3	108.8	59.95	39.9	150.1
Printing, publishing, and allied industries—Continued																		
	Newspapers and periodicals			Printing, book and job			Lithographing			Total: Chemicals and allied products			Paints, varnishes, and colors			Drugs, medicines, and insecticides		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
1939: Average	\$37.58	36.1	100.4	\$30.30	38.3	80.4				\$25.59	39.5	64.9	\$28.48	40.5	70.4	\$24.16	39.7	59.2
1941: January	38.15	35.4	105.2	31.64	39.6	81.0				27.53	39.9	69.0	29.86	40.3	74.1	24.68	39.3	61.9
1946: June	56.08	37.9	144.9	49.82	41.6	120.3	\$53.03	43.4	122.1	43.95	40.5	108.4	47.10	42.9	109.9	38.26	40.2	95.3
July	56.62	37.9	145.9	50.03	41.5	121.2	51.80	41.8	124.1	44.67	40.7	109.8	46.62	42.2	110.9	38.42	39.7	97.0
August	58.09	38.7	147.5	50.83	41.8	122.0	53.97	43.3	124.6	44.91	40.8	110.2	47.41	42.6	111.4	38.91	39.8	97.9
September	60.04	39.4	149.5	51.50	42.0	123.2	53.99	42.9	125.8	45.41	40.9	111.0	46.52	41.4	112.4	39.05	39.5	98.7
October	60.28	39.3	151.1	51.50	41.7	123.8	55.08	43.4	127.0	45.50	41.3	110.2	47.07	41.6	113.4	39.91	40.2	99.0
November	61.11	39.3	152.8	52.60	41.9	125.9	55.76	42.9	129.9	45.88	41.3	111.2	48.16	41.8	115.4	41.06	40.2	101.9
December	62.95	39.3	156.9	54.98	42.7	129.5	57.55	44.1	130.6	47.14	41.6	113.3	49.17	42.2	116.6	42.01	40.6	103.5
1947: January	62.08	38.9	157.5	54.19	42.0	129.7	57.54	43.5	132.3	47.39	41.5	114.3	49.69	42.1	118.1	41.86	40.4	103.6
February	63.00	38.6	160.7	54.07	40.8	133.6	56.55	42.6	132.6	48.17	41.4	116.5	50.34	42.3	119.2	43.15	41.1	105.2
March	64.25	38.8	162.6	55.67	41.1	136.4	58.47	41.8	139.8	48.60	41.3	117.7	51.63	42.5	121.6	42.86	41.1	104.4
April	65.29	38.9	165.1	56.13	40.7	138.6	58.80	41.8	140.8	48.93	41.0	119.2	51.81	42.5	122.2	42.80	40.6	105.3
May	67.10	38.9	169.9	56.32	40.6	140.0	57.73	41.2	140.3	49.81	41.1	121.1	52.36	42.5	123.6	43.19	40.3	107.2
June	67.16	38.4	171.8	56.56	40.7	141.0	58.70	41.4	141.7	50.72	41.2	123.2	52.81	42.5	124.4	43.49	39.9	109.1
Chemicals and allied products—Continued																		
	Soap			Rayon and allied products			Chemicals, not elsewhere classified			Explosives and safety fuses			Ammunition, small arms			Cottonseed oil		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
1939: Average	\$28.11	39.8	70.7	\$24.52	37.9	64.6	\$31.30	40.0	78.4	\$29.99	38.8	77.3	\$22.68	39.0	61.2	\$13.70	44.3	30.2
1941: January	29.58	40.0	74.0	27.26	39.2	69.6	33.10	40.3	82.2	31.56	37.8	83.5	24.05	38.6	62.3	15.55	44.6	33.8
1946: June	47.60	40.9	116.4	40.09	38.3	104.7	50.69	40.8	124.3	48.53	39.1	123.2	42.10	37.7	111.5	29.42	46.0	64.0
July	47.08	41.0	114.8	41.08	38.6	106.5	52.09	41.5	125.6	47.96	38.9	123.3	42.65	38.6	110.6	29.65	47.0	63.1
August	47.22	40.7	115.9	42.62	39.1	108.9	51.81	41.1	126.0	48.37	39.1	123.7	39.53	38.7	102.3	30.84	46.9	65.7
September	47.30	40.5	116.7	43.55	39.3	110.7	52.61	41.1	128.1	50.98	41.3	123.3	44.05	39.1	112.7	31.93	49.9	64.0
October	47.85	41.0	116.6	42.98	39.2	109.7	52.87	41.4	127.8	50.26	40.7	123.4	45.80	40.4	113.3	33.47	51.9	64.5
November	48.08	40.8	117.9	43.31	39.1	110.7	52.96	41.1	128.8	49.53	39.8	124.3	46.98	40.9	114.8	35.14	52.6	66.8
December	52.93	43.3	122.2	43.76	39.2	111.7	54.15	41.2	131.6	51.68	40.7	127.0	47.38	41.2	115.0	36.49	53.6	68.1
1947: January	53.08	42.8	124.1	44.14	39.5	111.7	54.77	41.3	132.7	53.08	41.0	129.5	48.14	41.5	116.1	35.91	52.2	68.8
February	53.46	43.1	124.0	47.31	39.3	120.5	55.10	41.0	134.2	50.07	39.4	126.9	48.55	41.4	117.2	35.77	51.7	69.2
March	54.12	42.5	127.2	47.92	39.2	122.1	55.33	40.9	135.1	50.60	39.0	129.9	48.27	41.6	116.1	35.69	50.3	70.9
April	54.78	42.8	128.1	42.59	39.4	123.3	55.45	40.8	135.9	49.57	37.4	132.5	48.24	41.4	116.4	33.88	48.0	70.6
May	55.19	42.2	130.9	48.37	39.5	122.4	56.35	41.0	137.5	53.31	40.2	132.6	49.12	41.2	119.2	35.29	49.2	71.8
June	56.84	43.1	131.9	48.63	39.6	122.9	56.80	40.9	139.0	54.77	40.4	135.7	49.62	41.8	118.6	35.83	48.6	73.7

See footnotes at end of table.

TABLE C-1: Average Earnings and Hours in Manufacturing and Nonmanufacturing Industries¹—Con.

Year and month	Chemicals and allied products—Con.			Products of petroleum and coal												Rubber products		
	Fertilizers			Total: Products of petroleum and coal			Petroleum refining			Coke and by-products			Roofing materials			Total: Rubber products		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
1939: Average.....	\$14.71	35.8	41.2	\$32.62	36.5	89.4	\$34.97	36.1	97.4	Cents			Cents			\$27.84	36.9	75.4
1941: January.....	14.89	34.8	42.9	32.46	36.6	88.7	34.46	35.7	97.0							30.38	39.0	77.9
1946: June.....	32.58	41.7	78.1	53.34	39.6	134.7	56.46	39.5	143.1	\$43.65	37.5	116.1	\$48.42	44.8	108.1	50.45	39.3	128.3
July.....	34.11	42.7	79.8	54.19	40.0	135.5	57.02	39.7	143.7	46.65	38.9	119.5	48.06	44.5	108.0	50.60	39.2	129.2
August.....	35.09	42.1	83.4	54.36	40.3	134.7	57.10	40.0	142.7	46.77	39.6	117.6	49.61	44.5	111.4	51.03	39.4	129.5
September.....	35.62	42.3	84.2	55.25	40.4	136.8	58.35	40.2	145.3	47.07	39.4	119.1	48.82	43.6	112.0	53.69	40.6	132.3
October.....	33.87	41.0	82.7	54.38	40.4	134.7	57.32	40.2	142.8	46.34	39.2	117.7	49.46	44.2	112.0	51.74	39.4	131.3
November.....	32.97	40.1	82.1	54.50	40.3	135.1	57.11	40.0	142.9	46.64	39.5	117.7	51.10	44.4	115.0	52.93	40.0	132.3
December.....	34.64	42.1	82.4	54.55	40.0	136.2	57.80	40.4	143.4	43.56	36.7	119.1	50.92	44.1	115.6	54.63	41.1	133.1
1947: January.....	33.44	41.3	81.0	55.24	40.2	137.2	57.74	39.9	144.7	48.11	39.5	121.2	51.99	44.6	116.7	54.03	40.6	133.0
February.....	33.44	41.4	80.8	55.39	40.1	138.2	57.75	39.8	145.1	48.88	39.6	123.1	52.59	44.0	119.6	54.06	40.6	133.1
March.....	34.42	42.3	81.4	56.53	40.2	140.8	59.15	39.8	148.8	48.95	39.6	123.1	53.14	44.6	119.3	52.97	39.8	133.0
April.....	35.30	42.3	83.5	57.41	40.5	141.8	60.24	40.1	150.1	49.19	39.9	123.2	54.21	44.7	121.1	55.23	39.5	139.7
May.....	36.76	42.9	85.7	57.92	40.0	144.8	60.01	39.5	152.0	51.93	39.7	130.7	55.40	45.1	122.9	55.30	39.0	141.6
June.....	36.49	41.7	87.5	59.64	40.7	146.4	62.17	40.6	153.2	52.87	39.8	132.8	54.87	43.9	125.1	55.49	39.1	141.9
Rubber products—Continued																		
Miscellaneous industries																		
Rubber tires and inner tubes			Rubber boots and shoes			Rubber goods, other			Total: Miscellaneous industries			Instruments (professional and scientific), and fire control equipment			Pianos, organs, and parts			
Cents			Cents			Cents			Cents			Cents			Cents			
1939: Average.....	\$33.36	35.0	95.7	\$22.80	37.5	60.7	\$23.34	38.9	60.5	\$24.48	29.3	62.4	Cents			Cents		
1941: January.....	36.67	37.7	97.5	26.76	41.9	63.9	24.97	39.4	63.9	25.35	39.3	64.5	\$35.33	45.7	77.3			
1946: June.....	54.82	37.4	146.1	44.98	41.8	107.6	45.44	41.7	109.1	42.93	41.2	104.2	49.57	40.6	121.1	\$45.77	42.0	109.1
July.....	56.11	38.0	147.2	42.98	39.6	108.5	44.93	40.8	110.2	42.42	40.5	104.8	49.06	39.9	122.9	44.04	40.6	108.6
August.....	55.42	37.4	147.4	44.45	41.2	107.8	46.85	41.8	112.0	43.40	41.0	105.7	49.74	40.2	123.3	46.11	41.3	112.1
September.....	59.89	39.6	150.7	45.27	41.5	109.1	47.01	41.8	112.5	44.25	41.1	107.6	50.43	40.3	124.3	47.73	42.2	113.4
October.....	57.38	38.2	149.2	38.93	37.3	104.3	47.00	41.6	113.0	45.04	41.4	108.8	51.23	40.6	125.2	48.31	42.0	115.1
November.....	58.87	39.0	150.3	43.80	40.4	108.3	46.74	41.4	113.0	45.08	41.1	109.8	51.01	40.1	125.8	50.95	42.8	119.5
December.....	60.46	39.8	151.3	45.93	42.0	109.3	48.68	42.6	114.3	45.85	41.6	110.3	52.20	40.7	126.9	47.65	40.5	118.0
1947: January.....	59.78	39.5	151.1	46.06	41.9	109.9	48.12	42.0	114.6	45.98	41.1	112.0	52.00	40.1	127.3	53.37	42.5	125.9
February.....	59.90	39.3	151.7	45.83	42.0	109.2	48.27	42.1	114.7	46.06	41.0	112.3	51.50	39.7	127.9	53.20	42.3	126.2
March.....	58.05	38.2	151.2	44.91	41.2	109.0	48.23	41.8	115.4	46.71	41.0	113.9	51.95	39.8	128.6	51.42	41.0	125.7
April.....	61.64	38.2	160.8	47.03	40.8	115.2	48.53	41.0	118.4	46.35	40.6	114.2	52.10	39.5	130.1	51.53	41.4	125.1
May.....	61.12	37.6	162.2	48.59	40.6	119.6	48.81	40.6	120.1	46.50	40.3	115.4	51.81	38.9	131.3	52.92	41.4	128.5
June.....	61.35	37.7	161.5	49.62	41.2	120.6	48.95	40.5	120.9	46.97	40.3	116.7	54.67	39.5	136.0	52.25	41.1	127.3
Mining																		
Anthracite			Bituminous coal			Metal												
Cents			Cents			Total: Metal			Iron			Copper			Lead and zinc			
Cents			Cents			Cents			Cents			Cents			Cents			
1939: Average.....	\$25.67	27.7	92.3	\$23.88	27.1	88.6	\$28.93	40.9	70.8	\$26.36	35.7	73.8	\$28.08	41.9	67.9	\$26.39	38.7	68.3
1941: January.....	25.13	27.0	92.5	26.00	29.7	88.5	30.63	41.0	74.7	29.26	39.0	75.0	30.93	41.8	74.9	28.61	38.2	74.9
1946: June.....	59.58	38.2	155.9	64.44	43.4	147.4	48.13	40.8	118.0	47.41	39.8	119.2	48.96	41.6	117.8	48.13	40.9	117.8
July.....	49.53	31.7	156.2	52.27	36.0	145.7	47.70	39.6	120.5	48.10	40.2	119.8	50.47	41.2	122.5	43.60	36.2	120.4
August.....	60.65	37.9	159.8	62.84	42.8	146.6	49.59	40.9	121.2	48.03	40.2	119.4	52.13	42.4	123.1	48.70	39.9	121.9
September.....	60.67	37.7	161.1	61.65	41.8	148.0	49.53	40.6	122.1	48.45	39.8	121.9	51.09	41.9	122.1	49.47	40.3	122.7
October.....	61.82	39.2	159.3	62.49	42.9	146.0	49.63	41.0	121.0	48.06	40.3	119.3	51.66	42.3	122.0	49.23	40.2	122.4
November.....	56.57	35.7	158.2	61.54	41.7	147.7	48.59	39.9	121.9	46.36	38.4	120.7	50.71	41.7	121.7	48.63	39.5	123.2
December.....	65.82	40.9	161.5	69.56	46.7	149.1	52.04	42.2	123.2	47.89	39.7	120.7	55.46	45.1	122.9	53.69	42.3	126.8
1947: January.....	62.40	39.1	159.4	69.54	46.7	149.1	50.65	41.2	122.9	46.18	39.1	118.1	54.38	44.0	123.7	52.43	40.9	128.3
February.....	57.42	35.1	163.7	65.30	43.6	149.1	52.01	42.0	123.8	48.71	40.5	120.3	54.94	44.3	124.1	53.19	41.4	128.6
March.....	64.84	39.8	163.2	64.90	43.7	148.4	51.63	41.6	124.1	48.54	40.2	120.8	54.58	44.1	123.6	52.62	40.6	129.5
April.....	49.89	32.3	154.5	54.14	36.4	148.3	51.68	41.8	123.7	48.00	39.9	120.2	54.53	44.1	123.7	53.91	41.8	129.0
May.....	59.15	37.2	159.3	65.51	44.3	147.0	53.96	42.2	127.8	52.62	40.9	128.6	56.41	44.5	126.9	54.22	41.8	129.6
June.....	62.39	39.2	159.6	67.09	44.7	148.9	56.06	42.8	130.9	55.68	40.9	136.2	58.05	46.0	126.2	55.45	42.3	131.2

TABLE C-1: Average Earnings and Hours in Manufacturing and Nonmanufacturing Industries¹—Con.

Year and month	Mining—Continued						Public utilities											
	Quarrying and nonmetallic			Crude petroleum production			Telephone**			Telegraph ³			Electric light and power			Street railways and busses		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
1939: Average.....	\$21.61	39.2	55.0	\$34.09	38.3	87.3	\$31.94	39.1	82.2				\$34.38	39.6	86.9	\$33.13	45.9	71.4
1941: January.....	22.06	38.2	57.6	33.99	37.7	88.5	32.52	39.7	82.4				35.49	39.4	90.3	33.63	45.3	73.1
1946: June.....	45.32	45.7	99.4	52.23	39.5	132.2	44.93	39.3	114.7	\$40.39	44.5	90.8	52.07	40.9	127.5	52.46	49.3	105.3
July.....	45.51	45.4	100.4	52.97	40.4	131.1	44.82	39.7	113.5	41.15	45.2	91.0	51.96	41.5	125.8	54.60	48.4	109.7
August.....	47.11	46.5	101.6	53.42	40.9	130.7	44.19	39.3	112.9	41.31	45.4	91.0	52.27	41.6	126.0	55.35	48.6	109.9
September.....	47.97	46.1	104.2	53.19	39.9	133.4	44.10	38.5	114.8	40.98	44.8	91.4	52.78	41.0	129.1	54.50	47.5	111.0
October.....	48.28	46.1	104.7	53.72	41.2	130.8	44.30	39.1	113.7	47.37	44.4	106.7	53.18	41.9	128.4	55.62	47.7	113.0
November.....	47.40	45.4	104.5	54.25	40.4	133.4	44.40	39.3	113.1	46.25	43.5	106.3	53.61	41.6	130.2	54.64	47.3	112.5
December.....	48.07	45.8	105.2	53.15	39.5	134.6	42.98	38.0	113.2	45.94	43.2	106.2	54.58	41.4	133.7	55.26	47.9	114.2
1947: January.....	45.55	43.1	105.8	56.02	41.3	135.5	43.37	38.4	113.2	46.83	43.8	106.9	54.11	41.9	131.3	55.98	47.7	116.5
February.....	45.34	42.8	106.2	55.86	40.3	139.0	43.31	38.0	114.1	51.23	44.0	116.4	55.37	41.6	135.2	56.70	48.0	117.4
March.....	46.41	43.5	106.9	56.25	39.6	142.1	42.51	37.9	112.4	50.91	43.7	116.4	54.43	41.0	134.1	56.82	47.8	118.4
April.....	48.67	44.5	108.0	58.74	40.8	144.4	32.26	26.9	117.4	59.27	47.3	125.2	55.90	42.2	134.3	56.94	47.8	119.0
May.....	49.86	45.6	108.2	58.71	40.5	144.8	38.13	31.5	118.9	57.17	46.0	124.2	55.90	41.6	135.8	56.99	47.6	119.5
June.....	50.92	45.6	111.0	61.46	41.9	147.5	45.58	37.5	121.8	55.36	44.8	123.6	57.84	42.2	138.8	57.71	47.4	121.2
Trade																		
	Wholesale						Retail											
							Total: Retail			Food			General merchandise			Apparel		
	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings
1939: Average.....	\$29.85	41.7	71.5	\$21.17	43.0	53.6	\$23.37	43.9	52.5	\$17.80	38.8	45.4	\$21.23	38.8	54.3	\$28.62	44.5	66.0
1941: January.....	30.59	40.6	75.6	21.53	42.9	54.9	23.78	43.6	53.7	18.22	38.8	46.6	21.89	39.0	56.0	27.96	43.9	66.6
1946: June.....	47.88	41.4	114.6	32.93	40.9	87.6	39.41	41.8	90.3	27.80	36.9	73.4	34.10	37.3	92.1	44.33	43.6	103.6
July.....	48.06	41.4	115.5	33.64	41.3	88.8	40.20	42.3	92.1	28.22	37.5	74.2	34.27	37.4	92.6	44.86	43.8	105.8
August.....	48.14	41.7	114.8	33.81	41.3	89.3	40.38	42.7	92.4	28.63	37.6	74.7	34.93	37.5	92.5	44.52	43.5	104.5
September.....	49.54	41.8	117.9	33.76	40.8	90.8	40.08	41.0	94.0	28.57	36.7	75.6	35.26	37.2	95.4	46.59	43.9	108.0
October.....	49.44	41.9	117.2	33.19	40.1	90.7	40.16	41.0	94.3	27.65	35.7	75.7	34.68	36.5	96.0	45.84	43.3	107.4
November.....	49.80	41.6	118.6	33.04	39.7	91.7	40.42	40.3	97.2	27.63	35.5	76.0	34.74	36.4	96.2	47.26	43.6	110.1
December.....	51.20	42.3	120.2	33.73	40.3	91.9	41.19	40.8	98.1	29.33	36.4	76.5	35.52	36.9	96.8	49.39	43.8	113.2
1947: January.....	50.05	41.5	119.7	35.02	39.9	95.3	41.50	40.1	101.2	29.75	35.9	81.1	35.89	36.9	95.7	45.86	42.2	112.5
February.....	50.87	40.8	123.0	35.27	40.1	95.7	42.04	40.4	101.9	29.98	36.1	80.9	35.85	37.3	95.6	45.85	41.9	111.6
March.....	50.80	40.8	123.1	35.31	40.0	96.0	41.67	40.1	102.2	29.91	36.0	80.9	35.99	36.8	97.5	46.96	42.1	115.2
April.....	51.13	41.2	122.9	35.93	40.0	97.4	42.39	40.0	102.9	30.60	36.1	82.3	37.07	36.8	99.9	47.82	42.4	117.0
May.....	51.57	41.2	124.1	36.50	39.9	98.6	43.29	40.0	105.1	31.24	36.0	84.0	36.98	36.8	99.7	49.01	42.5	118.0
June.....	52.88	41.6	126.2	37.60	40.8	99.6	44.57	41.0	105.8	32.15	37.1	84.7	37.86	37.2	101.3	50.20	43.2	119.3

See footnotes at end of table.

TABLE C-1: Average Earnings and Hours in Manufacturing and Nonmanufacturing Industries¹—Con.

Year and month	Trade—Continued						Service									Finance			
	Retail—Continued						Hotels ⁴ (year-round)			Power laundries			Cleaning and dyeing			Security brokerage ⁵	Insurance ⁶		
	Automotive			Lumber and build- ing materials															
	Avg. wkly. earn- ings	Avg. wkly. hours	Avg. hrly. earn- ings	Avg. wkly. earn- ings	Avg. wkly. hours	Avg. hrly. earn- ings	Avg. wkly. earn- ings	Avg. wkly. hours	Avg. hrly. earn- ings	Avg. wkly. earn- ings	Avg. wkly. hours	Avg. hrly. earn- ings	Avg. wkly. earn- ings	Avg. wkly. hours	Avg. hrly. earn- ings	Avg. wkly. earnings	Avg. wkly. earnings		
			Cents			Cents			Cents			Cents			Cents				
1939: Average.....	\$27.07	47.6	57.1	\$26.22	42.7	61.9	\$15.25	46.6	32.4	\$17.69	42.7	41.7	\$19.96	41.8	49.0		\$36.63	\$36.32	
1941: January.....	28.26	46.8	60.6	26.16	41.7	63.4	15.65	45.9	33.8	18.37	42.9	42.9	19.92	41.9	48.8		38.25	37.62	
1946: June.....	47.47	46.3	104.0	42.08	43.2	98.8	26.70	43.9	59.8	30.64	43.3	70.3	36.29	43.8	83.4		67.30	51.51	
July.....	47.36	46.1	104.6	42.32	42.7	100.1	26.63	44.0	60.2	30.37	43.4	69.8	35.58	43.2	82.6		64.04	50.76	
August.....	47.97	46.3	105.9	42.93	43.0	101.2	27.15	43.8	61.4	29.97	43.0	69.3	35.01	42.6	83.2		62.61	49.87	
September.....	49.15	46.5	107.7	43.60	43.1	102.4	26.98	43.5	62.0	30.45	42.9	70.8	35.81	42.9	83.9		63.50	50.63	
October.....	48.82	46.1	107.9	43.70	43.1	103.3	27.27	43.8	62.6	30.52	43.0	70.8	35.81	42.2	85.4		62.24	51.20	
November.....	48.74	46.1	108.7	43.32	42.3	104.0	28.15	43.8	64.2	31.05	42.6	72.9	35.32	41.9	85.4		62.06	51.24	
December.....	50.61	47.2	109.3	44.78	43.5	103.7	28.40	43.7	65.1	32.13	43.5	73.9	36.50	42.8	86.7		63.78	52.25	
1947: January.....	49.01	45.7	109.2	44.30	43.0	104.3	28.62	43.8	64.8	32.46	43.3	74.5	36.29	42.3	87.4		62.56	52.46	
February.....	49.69	45.7	109.8	*45.31	43.0	106.1	28.91	44.3	65.4	31.78	42.5	74.8	34.93	41.1	86.1		63.87	53.04	
March.....	49.58	45.4	110.8	45.74	43.3	106.8	29.09	44.7	64.2	32.18	42.4	75.9	36.41	42.0	87.6		62.91	52.18	
April.....	50.45	45.5	112.5	45.70	42.8	107.8	29.41	44.9	64.2	32.37	42.8	75.7	36.77	41.9	88.8		61.36	52.65	
May.....	50.54	45.6	112.4	46.32	43.4	109.4	29.23	45.0	64.3	32.45	42.7	75.6	37.70	42.6	89.4		61.06	52.35	
June.....	52.25	46.0	114.1	47.43	43.3	110.4	29.85	45.1	64.5	33.21	42.8	76.7	38.10	42.9	89.8		64.04	53.75	

¹ These figures are based on reports from cooperating establishments covering both full- and part-time employees who worked or received pay during any part of the pay period ending nearest the 15th of June 1947. The figures shown below relate to firms reporting man-hour data in all cases except security brokerage and insurance; weekly earnings are based on a slightly larger sample (see footnote 1, tables A-5 and A-8).

Manufacturing: 31,700 establishments; 7,127,000 production workers.

Mining: 2,500 establishments; 346,000 production workers.

Public utilities: 6,900 establishments; 776,000 employees.

Wholesale trade: 8,800 establishments; 234,000 employees.

Retail trade: 28,200 establishments; 709,000 employees.

Hotels (year-round): 900 establishments; 85,000 employees.

Power laundries and cleaning and dyeing: 1,300 establishments; 64,000 production workers.

Finance: 3,800 establishments; 172,000 employees.

For manufacturing, mining, power laundries, and cleaning and dyeing industries, the data relate to production workers only. For the remaining industries the data relate to all employees except high paid executives and officials. Data for the two current months are subject to revision without notation. Revised data for earlier months are identified by an asterisk.

² New series beginning with month and year shown below; not comparable with data shown for earlier periods:

Metal doors, sash, frames, molding, and trim—January 1947; comparable December 1946 data are \$52.33, 43.2 hours, and 121.2 cents.

Steel barrels, kegs, and drums—January 1947; comparable December 1946 data are \$49.69 and 116.9 cents.

Machine-tool accessories—June 1946; comparable May data are \$55.66 and 133.3 cents.

Washing machines, wringers and driers, domestic—January 1947; comparable December 1946 data are \$49.81 and 119.4 cents.

Refrigerators and refrigeration equipment—February 1947; comparable January data are \$51.05.

Cars, electric, and steam, railroad—March 1947; comparable February data are 130.3 cents.

Aluminum manufactures—January 1947; comparable December 1946 data are \$48.34.

Corsets and allied garments—August 1946; comparable July data are \$32.21 and 85.2 cents.

Textile bags—July 1946; comparable June data are 82.0 cents.

Butter—January 1947; comparable December 1946 data are 47.5 hours and 88.8 cents.

Confectionery—January 1947; comparable December 1946 data are 91.8 cents.

Envelopes—February 1947; comparable January data are \$44.12.

³ Data relate to all land line employees except those compensated on a commission basis. Excludes general and divisional headquarters personnel, trainees in school, and messengers.

⁴ Money payments only; additional value of board, room, uniforms, and tips, not included.

⁵ Data on average weekly hours and average hourly earnings are not available.

⁶ Revised.

^{**} April and May data reflect work stoppages.

TABLE C-2: Estimated Adjusted Hourly Earnings, Exclusive of Overtime,¹ of Production Workers in Manufacturing Industries

Year and month	All manufacturing			Durable goods			Nondurable goods		
	Based on distribution of total man-hours worked among major industry groups			Based on distribution of total man-hours worked among major industry groups			Based on distribution of total man-hours worked among major industry groups		
	As currently reported	As reported in January 1941		As currently reported	As reported in January 1941		As currently reported	As reported in January 1941	
		Absolute value	Index January 1941=100		Absolute value	Index January 1941=100		Absolute value	Index January 1941=100
	Cents	Cents		Cents	Cents		Cents	Cents	
1941: January.....	66.4	66.4	100.0	72.2	72.2	100.0	60.1	60.1	100.0
1942: January.....	76.2	75.1	113.1	83.5	82.6	114.4	67.0	66.8	111.1
October.....	83.9	80.7	121.5	91.9	88.8	123.0	72.3	71.8	119.5
1943: January.....	85.9	81.9	123.3	94.1	90.5	125.3	73.3	72.6	120.8
October.....	91.6	86.3	130.0	99.7	95.0	131.6	78.1	76.8	127.8
1944: January.....	93.1	87.7	132.1	101.3	96.5	133.7	79.3	78.0	129.8
October.....	95.6	90.8	136.7	103.8	99.1	137.3	82.9	81.7	135.9
1945: January.....	97.0	92.0	138.6	105.3	100.5	139.2	84.0	82.7	137.6
October.....	94.5	94.2	141.9	102.1	101.4	140.4	87.0	86.3	143.6
1946: January.....	96.6	97.0	146.1	103.3	103.7	143.6	90.3	89.5	148.9
February.....	96.7	98.2	147.9	103.2	104.7	145.0	91.7	91.1	151.6
March.....	99.9	100.8	151.8	106.7	107.8	149.3	93.9	93.2	155.1
April.....	102.3	102.7	154.7	109.6	110.2	152.6	95.4	94.6	157.4
May.....	104.2	104.7	157.7	112.0	112.7	156.1	96.6	95.9	159.6
June.....	105.3	105.7	159.2	113.4	114.2	158.2	97.2	96.4	160.4
July.....	106.4	106.7	160.7	115.0	115.5	160.0	97.7	97.0	161.4
August.....	107.6	107.9	162.5	115.0	115.6	160.1	100.1	99.5	165.6
September.....	109.2	109.4	164.8	116.6	117.2	162.3	101.5	100.8	167.7
October.....	109.3	109.5	164.9	116.3	116.9	161.9	102.1	101.4	168.7
November.....	110.3	110.5	166.4	117.5	118.1	163.6	103.0	102.2	170.0
December.....	110.7	110.6	166.6	117.6	117.8	163.2	103.6	102.7	170.9
1947: January.....	112.2	112.0	168.7	118.6	118.8	164.5	105.5	104.6	174.0
February.....	113.3	113.1	170.3	119.2	119.4	165.4	107.0	106.2	176.7
March.....	114.2	113.9	171.5	119.6	119.8	165.9	108.4	107.6	179.0
April.....	115.1	114.6	172.6	120.5	120.6	167.0	109.0	108.0	179.7
May.....	117.0	116.7	175.8	123.7	124.2	172.0	109.7	108.6	180.7
June.....	118.8	118.4	178.3	126.1	126.6	175.3	110.6	109.5	182.2

¹ Overtime is defined as work in excess of 40 hours per week and paid for at time and a half. The method of estimating adjusted hourly earnings exclusive of overtime makes no allowance for special rates of pay for work done on holidays. Data for the months of January, July, September, and November,

therefore, may not be precisely comparable with data for the other months in which important holidays are seldom included in the reporting pay period. This characteristic of the data does not appear to invalidate the comparability of the figure for January 1941 with those for the following months.

TABLE C-3: Average Earnings and Hours on Private Construction Projects, by Type of Firm¹

Year and month	Building construction																	
	All types, private construction projects			Total building			General contractors			Special building trades								
										All trades ²			Plumbing and heating			Painting and decorating		
	Avg. wkly. earnings ³	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings ³	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings ³	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings ³	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings ³	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings ³	Avg. wkly. hours	Avg. hrly. earnings
1940: Average.....	(4)	(4)	(4)	\$31.70	33.1	\$0.958	\$30.56	33.3	\$0.918	\$33.11	32.7	\$1.012	\$32.87	34.6	\$0.949	\$33.05	32.5	\$1.016
1941: January.....	(4)	(4)	(4)	32.18	32.6	.986	30.10	32.7	.946	33.42	32.6	1.025	34.16	35.8	.955	31.49	29.7	1.062
1946: June.....	\$54.92	38.6	\$1.423	55.23	38.2	1.444	52.39	37.9	1.384	58.64	38.7	1.515	59.07	39.2	1.508	58.86	38.1	1.545
July.....	56.16	38.6	1.454	56.25	38.2	1.473	53.01	37.7	1.408	60.09	38.8	1.547	60.92	39.4	1.548	58.81	37.6	1.565
August.....	56.61	38.7	1.462	56.67	38.2	1.482	53.66	37.8	1.419	60.34	38.7	1.558	61.43	39.5	1.555	59.75	37.8	1.581
September.....	58.39	39.3	1.485	58.49	38.7	1.510	55.64	38.4	1.450	61.87	39.2	1.580	63.70	40.2	1.584	62.06	38.6	1.609
October.....	58.93	39.2	1.505	59.20	38.8	1.526	56.39	38.5	1.463	62.39	39.1	1.596	63.89	40.1	1.593	62.16	38.4	1.620
November.....	57.38	37.6	1.527	57.65	37.2	1.549	54.68	36.8	1.485	61.11	37.7	1.622	62.62	38.6	1.620	57.39	35.2	1.629
December.....	59.92	38.8	1.545	60.32	38.4	1.569	56.73	38.0	1.495	64.53	40.0	1.655	67.44	40.8	1.655	61.05	36.9	1.653
1947: January.....	59.38	37.9	1.568	59.97	37.6	1.594	56.49	37.2	1.518	64.00	38.1	1.680	67.16	39.9	1.681	58.83	35.9	1.637
February.....	58.67	37.4	1.569	58.92	36.9	1.598	54.91	36.2	1.516	63.65	37.6	1.691	66.65	39.3	1.694	58.75	36.3	1.619
March.....	60.63	38.3	1.585	61.23	38.0	1.610	58.02	37.9	1.531	64.92	38.2	1.699	66.89	39.2	1.705	60.10	37.1	1.619
April.....	60.11	37.4	1.607	60.53	37.1	1.634	56.32	36.2	1.554	65.43	38.0	1.723	67.37	38.7	1.739	60.87	36.6	1.662
May.....	61.93	38.1	1.627	62.38	37.7	1.656	58.21	36.9	1.578	67.08	38.5	1.741	68.24	38.7	1.761	63.71	37.2	1.711
June.....	62.22	38.2	1.630	62.68	37.7	1.661	58.55	36.9	1.586	67.63	38.7	1.747	67.71	38.9	1.740	63.62	37.4	1.697

See footnotes at end of table.

TABLE C-3: Average Earnings and Hours on Private Construction Projects, by Type of Firm¹—Continued

Year and month	Building construction (continued)																		
	Special building trades (continued)																		
	Electrical work			Masonry			Plastering and lathing			Carpentry			Roofing and sheet metal			Excavation and foundation			
	Avg. wkly. earnings †	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings †	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings †	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings †	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings †	Avg. wkly. hours	Avg. hrly. earnings	
1940: Average.....	\$41.18	34.5	\$1.196	\$29.47	29.8	\$0.988	\$36.60	28.5	\$1.286	\$31.23	33.0	\$0.947	\$28.07	31.8	\$0.883	\$26.53	30.9	\$0.859	
1941: January.....	43.18	36.5	1.184	25.66	25.3	1.012	35.36	27.5	1.287	30.40	31.2	.974	27.60	30.3	.910	23.86	29.1	.820	
1946: June.....	67.51	41.1	1.643	54.72	37.7	1.453	61.89	37.8	1.639	55.93	39.2	1.425	50.53	37.4	1.350	52.46	38.6	1.361	
July.....	67.94	40.9	1.661	57.38	38.7	1.484	61.75	37.2	1.659	57.07	39.1	1.458	53.11	38.1	1.393	55.28	38.8	1.423	
August.....	67.58	40.3	1.678	58.36	38.6	1.510	64.60	37.7	1.716	56.82	39.4	1.442	53.30	37.7	1.414	54.21	38.3	1.416	
September.....	69.66	41.1	1.696	58.53	38.1	1.537	65.21	38.3	1.703	58.68	39.8	1.473	54.06	38.3	1.412	54.88	38.4	1.431	
October.....	70.59	40.8	1.732	58.70	38.0	1.544	66.43	38.5	1.727	59.95	39.1	1.531	54.33	37.5	1.448	51.85	37.9	1.369	
November.....	69.63	39.8	1.750	57.56	37.4	1.541	63.13	35.3	1.788	57.64	38.3	1.504	50.95	36.1	1.413	52.10	36.4	1.431	
December.....	74.76	41.4	1.808	58.36	37.5	1.556	71.04	38.7	1.837	57.85	38.2	1.513	52.84	36.4	1.450	54.94	37.9	1.450	
1947: January.....	73.85	40.2	1.838	56.49	34.9	1.618	69.81	37.9	1.842	58.20	37.7	1.544	51.49	34.9	1.477	53.98	36.3	1.487	
February.....	74.95	40.8	1.836	52.41	32.4	1.619	66.84	36.3	1.840	57.69	37.8	1.528	50.59	34.1	1.483	55.00	37.3	1.477	
March.....	75.75	40.5	1.872	57.37	35.1	1.637	69.15	37.9	1.822	62.98	39.6	1.591	53.67	35.8	1.497	58.36	37.7	1.550	
April.....	76.31	40.5	1.885	57.36	34.6	1.656	72.40	38.2	1.894	61.01	37.9	1.611	54.02	36.0	1.499	56.07	36.5	1.537	
May.....	76.33	40.4	1.890	62.01	37.2	1.668	74.95	38.9	1.926	62.67	38.9	1.612	57.43	37.2	1.542	59.70	38.5	1.552	
June.....	77.48	40.6	1.909	63.54	37.2	1.706	73.67	38.2	1.927	61.40	38.6	1.589	58.13	37.6	1.547	60.48	37.9	1.594	

Year and month	Nonbuilding construction											
	Total nonbuilding			Highway and street			Heavy construction			Other		
	Avg. wkly. earnings †	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings †	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings †	Avg. wkly. hours	Avg. hrly. earnings	Avg. wkly. earnings †	Avg. wkly. hours	Avg. hrly. earnings
	1940: Average.....	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)
1941: January.....	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	(³)	
1946: June.....	\$53.25	40.5	\$1.313	\$53.37	41.0	\$1.303	\$53.05	39.6	\$1.338	\$53.52	42.0	\$1.275
July.....	55.68	41.0	1.357	53.93	41.0	1.315	56.81	40.7	1.396	55.12	41.9	1.315
August.....	56.24	41.6	1.353	54.39	40.9	1.331	58.21	42.1	1.382	53.40	40.9	1.305
September.....	57.90	42.2	1.372	55.71	42.0	1.327	59.86	42.6	1.407	54.46	41.3	1.317
October.....	57.59	41.0	1.403	54.41	40.9	1.330	59.56	41.0	1.453	55.02	41.3	1.331
November.....	56.13	39.2	1.433	53.24	39.0	1.366	57.41	39.0	1.470	54.96	39.8	1.381
December.....	58.02	40.5	1.434	55.19	39.9	1.383	59.11	40.3	1.466	57.44	41.4	1.387
1947: January.....	56.67	39.0	1.451	52.23	37.3	1.401	57.94	39.1	1.482	56.61	40.5	1.398
February.....	57.49	39.9	1.441	53.83	39.1	1.378	59.15	40.2	1.472	55.44	39.7	1.395
March.....	57.82	39.3	1.473	53.72	38.0	1.412	58.98	39.2	1.504	57.83	40.5	1.429
April.....	58.30	38.9	1.499	52.82	37.4	1.411	60.48	39.2	1.542	57.13	39.4	1.451
May.....	60.01	39.8	1.508	54.26	38.7	1.404	62.50	40.1	1.559	58.60	40.2	1.459
June.....	60.17	40.1	1.501	56.92	40.4	1.408	61.36	39.7	1.544	60.02	40.8	1.473

¹ Covers all contract construction firms reporting to the Bureau during the months shown (over 11,000), but not necessarily identical establishments. The data include all employees of these construction firms working at the site of privately financed projects (skilled, semiskilled, unskilled, superintendents, time clerks, etc.). Employees of these firms engaged on publicly financed projects and off-site work are excluded.

² Includes types not shown separately.

³ Hourly earnings, when multiplied by weekly hours of work, may not exactly equal weekly earnings because of rounding.

⁴ Not available prior to February 1946.

⁵ Includes general contracting as well as general building maintenance, and other special building data.

D: Prices and Cost of Living

TABLE D-1: Consumers' Price Index¹ for Moderate-Income Families in Large Cities, by Group of Commodities

[1935-39=100]

Year and month	All items	Food	Apparel*	Rent	Fuel, electricity, and ice			House-furnishings	Miscellaneous
					Total	Gas and electricity	Other fuels and ice		
1913: Average.....	70.7	79.9	69.3	92.2	61.9	(?)	(?)	59.1	50.9
1914: July.....	71.7	81.7	69.8	92.2	62.3	(?)	(?)	60.8	52.0
1918: December.....	118.0	149.6	147.9	97.1	90.4	(?)	(?)	121.2	83.1
1920: June.....	149.4	185.0	209.7	119.1	104.8	(?)	(?)	169.7	100.7
1929: Average.....	122.5	132.5	115.3	141.4	112.5	(?)	(?)	111.7	104.6
1932: Average.....	97.6	86.5	90.8	116.9	103.4	(?)	(?)	85.4	101.7
1939: Average.....	90.4	95.2	100.5	104.3	99.0	98.9	99.3	101.3	100.7
August 15.....	98.6	93.5	100.3	104.3	97.5	99.0	96.3	100.6	100.4
1940: Average.....	100.2	96.6	101.7	104.6	99.7	98.0	101.6	100.5	101.1
1941: Average.....	105.2	105.5	106.3	106.2	102.2	97.1	107.4	107.3	104.0
January 1.....	100.8	97.6	101.2	105.0	100.8	97.5	104.0	100.2	101.8
December 15.....	110.5	113.1	114.8	108.2	104.1	96.7	111.3	116.8	107.7
1942: Average.....	116.5	123.9	124.2	108.5	105.4	96.7	113.9	122.2	110.9
1943: Average.....	123.6	138.0	129.7	108.0	107.7	96.1	119.0	125.6	115.8
1944: Average.....	125.5	136.1	138.8	108.2	109.8	95.8	123.4	136.4	121.3
1945: Average.....	128.4	139.1	145.9	108.3	110.3	95.0	125.1	145.8	124.1
August 15.....	129.3	140.9	146.4	(?)	111.4	95.2	127.2	146.0	124.5
1946: Average.....	139.3	159.6	160.2	108.6	112.4	92.4	132.0	159.2	128.8
June 15.....	133.3	145.6	157.2	108.5	110.5	92.1	128.4	156.1	127.9
July 15.....	141.2	165.7	158.7	(?)	113.3	92.1	133.8	157.9	128.2
August 15.....	144.1	171.2	161.2	108.7	113.7	91.8	135.0	160.0	129.8
September 15.....	145.9	174.1	165.9	108.8	114.4	91.7	136.5	165.6	129.9
October 15.....	148.6	180.0	168.1	(?)	114.4	91.6	136.6	168.5	131.0
November 15.....	152.2	187.7	171.0	(?)	114.8	91.8	137.2	171.0	132.5
December 15.....	153.3	185.9	176.5	(?)	115.5	92.0	138.3	177.1	136.1
1947: January 15.....	153.3	183.8	179.0	108.8	117.3	91.9	142.1	179.1	137.1
February 15.....	153.2	182.3	181.5	108.9	117.5	92.2	142.3	180.8	137.4
March 15.....	156.3	189.5	184.3	109.0	117.6	92.2	142.5	182.3	138.2
April 15.....	156.2	188.0	184.9	109.0	118.4	92.5	143.8	182.5	139.2
May 15.....	156.0	187.6	185.0	109.2	117.7	92.4	142.4	181.9	139.0
June 15.....	157.1	190.5	185.7	109.2	117.7	91.7	143.0	182.6	139.1

¹ The "consumers' price index for moderate-income families in large cities," formerly known as the "cost-of-living index," measures average changes in retail prices of selected goods, rents, and services, weighted by quantities bought by families of wage earners and moderate-income workers in large cities in 1934-36. The items priced for the index constituted about 70 percent of the expenditures of city families whose incomes averaged \$1,524 in 1934-36.

The President's Committee on the Cost of Living estimated that, because of quality deterioration, disappearance of cheaper goods, and other factors, the consumers' price index understated the rise in retail prices of living essentials by 3 to 4 points between January 1941 and September 1944 for large cities and an additional ½ point for small cities. Later the Stabilization Director, in December 1945, made an allowance of 4½ points for large cities and 5 points for large and small cities combined.

These adjustments have not been included by the Bureau in the published indexes. For a more detailed statement concerning these adjustments, see the *Monthly Labor Review* for March 1947.

Bureau of Labor Statistics Bulletin 666, Changes in Cost of Living in Large

Cities in the United States, 1913-41, contains a detailed description of methods used in constructing this index. Additional information on the consumers' price index is given in a compilation of reports published by the Office of Economic Stabilization, Report of the President's Committee on the Cost of Living.

Mimeographed tables are available upon request showing indexes for each of the cities regularly surveyed by the Bureau and for each of the major groups of living essentials. Indexes for all large cities combined are available since 1913. The beginning date for series of indexes for individual cities varies from city to city but indexes are available for most of the 34 cities since World War I.

² Data not available.

³ Rents not surveyed this month.

*Beginning with the consumers' price report for June 15, 1947, the Bureau's clothing indexes will be designated as "apparel" indexes to conform with general usage of the term in the trade and for uniformity in publications of the Bureau of Labor Statistics and other government agencies. There has been no change whatever in the composition of this group.

EDITOR'S NOTE

Tables D-1, D-2, and D-3 include the same data as appeared in the August 1947 Monthly Labor Review. Because of staff reductions arising from budgetary limitations, there has been a delay in the issuance of the Consumers' Price Index for July 1947. The necessary adjustments in the Bureau's program are rapidly nearing completion and no further delays are expected in issuing data for future months.

TABLE D-2: Consumers' Price Index for Moderate-Income Families by City,¹ for Selected Periods

[1935-39=100]

City	June 15, 1947	May 15, 1947	Apr. 15, 1947	Mar. 15, 1947	Feb. 15, 1947	Jan. 15, 1947	Dec. 15, 1946	Nov. 15, 1946	Oct. 15, 1946	Sept. 15, 1946	Aug. 15, 1946	July 15, 1946	June 15, 1946	Jan. 1, 1941 ²	Aug. 15, 1939
Average.....	157.1	156.0	156.2	156.3	153.2	153.3	153.3	152.2	148.6	145.9	144.1	141.2	133.3	100.8	98.6
Atlanta, Ga.....	159.1	(³)	(³)	160.9	(³)	(³)	155.8	(³)	(³)	146.5	(³)	(³)	133.8	99.8	98.0
Baltimore, Md.....	160.5	159.4	159.7	159.6	155.9	156.2	155.7	154.9	150.9	148.1	146.7	143.2	135.6	100.7	98.7
Birmingham, Ala.....	162.1	160.7	161.7	162.0	158.1	158.7	158.5	157.9	150.4	147.1	148.6	143.3	136.5	101.6	98.5
Boston, Mass.....	150.3	148.6	149.4	150.3	147.4	148.7	148.2	146.1	144.6	141.6	140.0	137.6	127.9	99.1	97.1
Buffalo, N. Y.....	157.7	156.2	155.3	155.3	152.4	152.7	151.7	149.6	146.5	144.9	142.2	139.6	132.6	101.9	98.5
Chicago, Ill.....	158.3	156.8	155.7	156.2	152.8	153.0	152.5	149.5	146.1	144.0	141.1	139.9	130.9	101.2	98.7
Cincinnati, Ohio.....	158.5	156.8	157.2	157.0	153.2	152.6	152.7	152.9	146.5	145.4	143.5	140.2	132.2	99.6	97.3
Cleveland, Ohio.....	160.3	159.0	159.2	159.2	155.9	156.1	156.2	154.0	149.5	147.6	147.0	143.8	135.7	102.0	100.0
Denver, Colo.....	155.9	155.8	155.8	154.8	152.2	151.4	152.5	151.9	143.7	142.5	140.1	138.1	131.7	100.0	98.6
Detroit, Mich.....	158.7	156.8	156.7	156.5	153.1	153.0	153.1	152.0	148.8	146.6	145.4	144.2	136.4	101.0	98.5
Houston, Tex.....	157.6	157.6	158.6	157.1	154.1	153.9	152.3	150.0	144.2	142.8	140.7	136.6	130.5	102.0	100.7
Indianapolis, Ind.....	158.0	(³)	(³)	157.5	(³)	(³)	154.2	(³)	(³)	146.1	(³)	(³)	131.9	102.0	98.0
Jacksonville, Fla.....	163.5	(³)	(³)	163.4	(³)	(³)	158.8	(³)	(³)	150.2	(³)	(³)	138.4	101.9	98.5
Kansas City, Mo.....	149.5	150.5	151.0	150.8	148.7	147.7	147.0	146.8	142.1	141.1	140.4	136.4	129.4	98.4	98.6
Los Angeles, Calif.....	156.3	157.6	157.4	156.9	155.9	155.3	154.5	154.5	148.5	145.5	144.6	142.3	136.1	102.5	100.5
Manchester, N. H.....	160.4	(³)	(³)	158.1	(³)	(³)	156.5	(³)	(³)	147.0	(³)	(³)	134.7	100.2	97.8
Memphis, Tenn.....	160.6	(³)	(³)	158.8	(³)	(³)	156.3	(³)	(³)	146.2	(³)	(³)	134.5	99.8	97.8
Milwaukee, Wis.....	156.6	(³)	(³)	154.5	(³)	(³)	150.6	(³)	(³)	142.8	(³)	(³)	131.2	99.2	97.0
Minneapolis, Minn.....	152.9	151.5	151.4	151.6	149.0	148.3	149.7	148.8	145.9	142.4	139.5	138.0	129.4	101.8	99.7
Mobile, Ala.....	159.3	(³)	(³)	159.2	(³)	(³)	153.6	(³)	(³)	145.2	(³)	(³)	132.9	100.4	98.6
New Orleans, La.....	164.6	(³)	(³)	164.5	(³)	(³)	162.9	(³)	(³)	153.8	(³)	(³)	138.0	101.7	99.7
New York, N. Y.....	156.9	155.6	156.8	157.4	154.2	154.6	155.2	154.3	152.8	149.4	145.7	143.9	135.8	101.0	99.0
Norfolk, Va.....	169.0	(³)	(³)	160.9	(³)	(³)	157.6	(³)	(³)	148.8	(³)	(³)	135.2	100.6	97.8
Philadelphia, Pa.....	157.1	155.1	154.9	156.1	151.6	152.3	152.5	150.5	147.8	146.0	143.7	140.0	132.5	99.2	97.8
Pittsburgh, Pa.....	161.1	159.6	159.0	159.2	156.5	156.0	155.4	153.8	149.4	147.4	145.9	142.8	134.7	101.2	98.4
Portland, Maine.....	153.3	(³)	(³)	152.5	(³)	(³)	149.2	(³)	(³)	141.4	(³)	(³)	128.7	98.5	97.1
Portland, Oreg.....	161.5	(³)	(³)	160.6	(³)	(³)	157.8	(³)	(³)	150.9	(³)	(³)	140.3	102.0	100.1
Richmond, Va.....	152.6	(³)	(³)	152.9	(³)	(³)	149.3	(³)	(³)	139.8	(³)	(³)	128.2	99.6	98.0
St. Louis, Mo.....	155.6	154.6	155.1	155.8	151.8	151.1	151.2	150.6	146.6	142.9	142.5	139.6	131.2	101.0	98.1
San Francisco, Calif.....	159.3	160.5	161.3	160.3	158.4	159.3	160.4	159.1	153.3	150.9	147.9	144.4	137.8	101.8	99.3
Savannah, Ga.....	165.8	165.5	166.2	166.6	162.5	162.3	162.2	161.8	155.2	153.8	152.7	148.8	140.6	101.4	99.3
Scranton, Pa.....	159.9	(³)	(³)	157.3	(³)	(³)	154.0	(³)	(³)	146.4	(³)	(³)	132.2	99.2	96.0
Seattle, Wash.....	158.3	158.5	159.1	158.2	155.4	155.7	157.2	155.3	151.9	147.9	144.8	142.9	137.0	102.1	100.3
Washington, D. C.....	156.0	154.6	154.8	154.7	151.5	152.1	152.0	150.3	147.6	145.0	142.6	140.5	133.8	99.9	98.6

¹ The indexes are based on time-to-time changes in the cost of goods and services purchased by moderate-income families in large cities. They do not indicate whether it costs more to live in one city than in another.

² Jan. 1, 1941, is the base date for determining allowable "cost of living" wage increases under the "Little Steel" formula and under the wage-price policy of February 1946. January 1, 1941, indexes have been estimated by

assuming an even rate of change from Dec. 15, 1940, to the next pricing period.

³ Until June 1947, consumers' price indexes were computed for 34 large cities in March, June, September, and December and in the intervening months for 21 of the 34 cities. Because of budgetary limitations, a new schedule was inaugurated in July 1947. (See statement on p. 393).

TABLE D-3: Consumers' Price Index for Moderate-Income Families, by City and Group of Commodities

[1935-39=100]

City	Food		Apparel		Rent		Fuel, electricity, and ice						House furnishings		Miscellaneous	
							Total		Gas and electricity		Other fuels and ice					
	June 15, 1947	May 15, 1947	June 15, 1947	May 15, 1947	June 15, 1947	May 15, 1947	June 15, 1947	May 15, 1947	June 15, 1947	May 15, 1947	June 15, 1947	May 15, 1947	June 15, 1947	May 15, 1947	June 15, 1947	May 15, 1947
Average.....	190.5	187.6	185.7	185.0	109.2	109.2	117.7	117.7	91.7	92.4	143.0	142.4	182.6	181.9	139.1	139.0
Atlanta, Ga.....	193.0	190.3	180.4	(1)	(2)	108.2	128.5	128.5	78.3	78.3	174.7	174.6	185.4	(1)	145.5	(1)
Baltimore, Md.....	202.2	198.5	180.5	182.6	(2)	(2)	125.0	124.7	113.0	112.4	134.7	134.6	186.3	182.5	136.4	137.2
Birmingham, Ala.....	197.3	195.8	184.4	180.4	(2)	(2)	120.5	120.5	79.6	79.6	151.2	151.2	171.7	169.1	138.7	137.8
Boston, Mass.....	179.6	175.6	173.5	171.8	(2)	(2)	127.5	127.5	105.5	105.5	139.4	139.4	175.2	174.7	136.3	136.4
Buffalo, N. Y.....	187.0	182.5	186.5	187.6	(2)	115.4	118.1	117.8	94.9	94.9	138.7	138.2	190.1	188.9	144.0	144.0
Chicago, Ill.....	193.9	190.6	184.8	183.0	(2)	116.4	112.4	111.7	83.5	83.5	142.4	141.0	175.8	173.4	137.6	137.4
Cincinnati, Ohio.....	191.1	187.9	185.5	181.9	106.3	(2)	116.2	116.2	90.8	90.8	140.4	140.4	179.3	178.2	140.3	140.0
Cleveland, Ohio.....	198.3	194.3	183.5	183.4	(2)	(2)	122.3	122.3	104.9	104.9	139.0	139.0	170.2	169.0	138.0	138.5
Denver, Colo.....	191.9	191.9	183.7	182.3	(2)	110.6	99.5	99.5	68.5	68.5	135.1	135.1	200.9	202.4	136.7	136.9
Detroit, Mich.....	188.5	182.7	182.1	181.9	115.4	(2)	122.3	122.2	83.7	83.8	151.6	151.4	190.3	188.4	149.8	150.1
Houston, Tex.....	196.2	197.1	188.5	187.0	(2)	(2)	94.4	94.4	81.9	81.9	128.0	127.9	184.2	182.4	139.8	139.8
Indianapolis, Ind.....	188.7	185.1	176.4	(1)	(2)	(2)	123.1	123.2	86.6	86.6	144.5	144.7	176.6	(1)	142.6	(1)
Jacksonville, Fla.....	199.1	196.0	177.0	(1)	(2)	(2)	130.5	130.3	92.8	92.8	163.2	162.8	170.6	(1)	151.1	(1)
Kansas City, Mo.....	180.0	180.7	169.0	170.0	(2)	(2)	109.4	121.3	66.3	91.2	148.8	148.7	171.4	170.2	138.3	137.9
Los Angeles, Calif.....	193.8	196.7	177.1	179.5	(2)	(2)	94.5	94.5	89.3	89.3	119.3	119.3	176.1	179.1	138.3	138.2
Manchester, N. H.....	190.3	185.1	176.1	(1)	108.6	(2)	131.5	131.5	94.6	94.6	150.0	149.9	187.4	(1)	135.6	(1)
Memphis, Tenn.....	205.1	201.6	195.1	(1)	(2)	(2)	116.2	114.6	77.0	77.0	137.9	135.4	159.0	(1)	131.7	(1)
Milwaukee, Wis.....	190.8	186.6	184.3	(1)	109.2	(2)	122.6	121.0	98.3	93.3	139.3	140.0	189.0	(1)	135.7	(1)
Minneapolis, Minn.....	182.6	179.0	188.1	187.0	(2)	(2)	114.9	114.5	78.9	78.9	138.5	137.7	178.9	177.3	137.5	137.5
Mobile, Ala.....	196.9	197.0	182.1	(1)	(2)	(2)	118.2	117.9	84.1	84.1	145.1	144.7	170.3	(1)	131.5	(1)
New Orleans, La.....	203.7	201.1	188.9	(1)	(2)	(2)	107.3	105.8	75.1	75.1	141.7	138.7	174.1	(1)	139.1	(1)
New York, N. Y.....	187.9	184.8	201.2	200.5	(2)	(2)	116.9	115.6	94.0	94.0	152.0	148.7	173.2	175.0	140.1	139.9
Norfolk, Va.....	198.0	198.8	175.1	(1)	(2)	109.3	125.3	125.3	94.9	94.9	149.3	149.3	182.9	(1)	143.3	(1)
Philadelphia, Pa.....	187.1	183.4	182.3	180.2	(2)	(2)	122.7	122.4	97.8	97.8	141.7	141.2	180.2	180.2	138.9	137.4
Pittsburgh, Pa.....	196.9	192.4	209.1	210.7	(2)	(2)	120.8	120.7	103.3	103.3	150.7	150.7	179.4	181.1	136.5	136.3
Portland, Maine.....	185.3	180.2	178.6	(1)	(2)	(2)	127.5	127.4	96.1	95.7	143.1	143.1	178.9	(1)	136.2	(1)
Portland, Ore.....	199.7	200.8	179.9	(1)	(2)	(2)	122.8	122.8	89.9	89.9	163.0	163.0	176.2	(1)	141.4	(1)
Richmond, Va.....	185.8	186.3	183.8	(1)	104.6	(2)	117.8	117.4	96.7	96.7	130.6	130.1	190.2	(1)	131.6	(1)
St. Louis, Mo.....	196.8	193.4	177.9	178.3	106.3	(2)	116.6	118.0	94.1	97.2	136.5	136.4	158.7	156.4	132.7	133.0
San Francisco, Calif.....	196.9	199.9	176.6	178.6	(2)	(2)	82.7	82.6	72.7	72.7	118.2	117.6	155.1	153.1	148.1	148.5
Savannah, Ga.....	209.4	208.2	172.6	174.0	(2)	(2)	128.2	128.2	91.2	91.2	150.1	150.0	189.2	190.4	142.7	142.6
Scranton, Pa.....	194.9	189.2	190.4	(1)	(2)	(2)	126.6	126.7	91.8	91.8	147.9	148.0	177.5	(1)	133.9	(1)
Seattle, Wash.....	193.3	193.9	178.2	178.0	(2)	(2)	112.4	112.1	86.8	85.8	133.8	134.1	184.8	183.6	143.1	143.4
Washington, D. C.....	190.9	187.8	205.1	202.8	(2)	(2)	118.9	118.1	94.4	94.4	135.2	133.9	189.8	188.3	143.7	143.2

¹ Until June 1947, prices of apparel, housefurnishings, and miscellaneous goods and services were obtained in 34 large cities in March, June, September, and December and in the intervening months for a shorter list of goods and

services in 21 of the 34 cities. Because of budgetary limitations a new schedule was inaugurated in July 1947. (See statement on p. 393.)

² Rents not surveyed this month.

TABLE D-4: Indexes of Retail Prices of Foods,¹ by Group, for Selected Periods

[1935-39=100]

Year and month	All foods	Cereals and bakery products	Meats						Dairy products	Eggs	Fruits and vegetables				Beverages	Fats and oils	Sugar and sweets
			Total	Beef and veal	Pork	Lamb	Chickens	Fish			Total	Fresh	Canned	Dried			
1923: Average	124.0	105.5	101.2						129.4	136.1	169.5	173.6	124.8	175.4	131.5	126.2	175.4
1926: Average	137.4	115.7	117.8						127.4	141.7	210.8	226.2	122.9	152.4	170.4	145.0	120.0
1929: Average	132.5	107.6	127.1						131.0	143.8	169.0	173.5	124.3	171.0	164.8	127.2	114.3
1932: Average	86.5	82.6	79.3						84.9	82.3	103.5	105.9	91.1	91.2	112.6	71.1	89.6
1939: Average	95.2	94.5	96.6	101.1	88.9	99.5	93.8	101.0	95.9	91.0	94.5	95.1	92.3	93.3	95.5	87.7	100.6
August	93.5	93.4	95.7	99.6	88.0	98.8	94.6	99.6	93.1	90.7	92.4	92.8	91.6	90.3	94.9	84.5	95.6
1940: Average	96.6	96.8	95.8	102.8	81.1	99.7	94.8	110.6	101.4	93.8	96.5	97.3	92.4	100.6	92.5	82.2	96.8
1941: Average	105.5	97.9	107.5	110.8	100.1	106.6	102.1	124.5	112.0	112.2	103.2	104.2	97.9	106.7	101.5	94.0	106.4
December	113.1	102.5	111.1	114.4	103.2	108.1	100.5	138.9	120.5	138.1	110.5	111.0	106.3	118.3	114.1	108.5	114.4
1942: Average	123.9	105.1	126.0	123.6	120.4	124.1	122.6	163.0	125.4	136.5	130.8	132.8	121.6	136.3	122.1	119.6	126.5
1943: Average	138.0	107.6	133.8	124.7	119.9	136.9	146.1	206.5	134.6	161.9	168.8	178.0	130.6	158.9	124.8	126.1	127.1
1944: Average	136.1	108.4	129.9	118.7	112.2	134.5	151.0	207.6	133.6	153.9	168.2	177.2	129.5	164.5	124.3	123.3	126.5
1945: Average	139.1	109.0	131.2	118.4	112.6	136.0	154.4	217.1	133.9	164.4	177.1	188.2	130.2	168.2	124.7	124.0	126.5
August	140.9	109.1	131.8	118.5	112.6	136.4	157.3	217.8	133.4	171.4	183.5	196.2	130.3	168.6	124.7	124.0	126.6
1946: Average	159.6	125.0	161.3	150.5	148.2	163.9	174.0	236.2	165.1	168.8	182.4	190.7	140.8	190.4	139.6	152.1	143.9
June	145.6	122.1	134.0	121.2	114.3	139.0	162.8	219.7	147.8	147.1	183.5	196.7	127.5	172.5	125.4	126.4	136.2
July	165.7	126.1	173.7	175.2	150.3	171.6	178.2	235.2	179.1	161.0	188.4	202.1	130.9	175.9	126.0	137.9	138.5
August	171.2	135.4	186.6	180.3	182.4	189.5	175.2	237.6	180.1	173.6	178.3	185.8	140.7	183.0	126.6	180.3	140.3
September	174.1	137.3	188.5	180.3	182.4	187.6	192.8	237.8	186.6	193.3	176.4	181.1	148.7	185.6	162.0	151.4	141.5
October	180.0	138.5	190.7	174.6	182.4	187.7	225.3	249.7	202.4	214.6	176.5	178.8	154.6	198.7	166.5	147.9	167.5
November	187.7	140.6	203.6	191.0	207.1	205.4	188.9	265.0	198.5	201.6	184.5	182.3	167.7	251.6	167.8	244.4	170.5
December	185.9	141.7	197.8	187.6	193.3	198.8	189.4	267.6	200.9	201.1	185.0	180.6	172.6	268.0	176.2	207.3	175.3
1947: January	183.8	143.4	199.0	190.9	190.8	205.3	185.8	271.3	190.1	181.7	187.9	184.1	173.6	269.2	178.3	201.9	176.2
February	182.3	144.1	196.7	190.0	191.6	204.3	176.5	258.7	183.2	169.9	191.7	189.3	172.6	269.9	182.8	201.3	178.1
March	189.5	148.1	207.6	195.1	217.2	209.7	178.3	266.0	187.5	174.7	199.6	199.4	172.9	271.3	186.9	219.1	178.6
April	188.0	153.4	202.6	194.6	203.5	206.5	177.1	261.0	178.9	176.3	200.4	200.7	172.6	269.7	189.5	227.8	179.3
May	187.6	154.2	203.9	197.1	204.2	209.6	179.6	255.1	171.5	178.9	207.0	209.5	172.3	268.1	188.9	200.5	179.3
June	190.5	154.6	216.9	216.4	213.6	226.7	182.3	254.7	171.5	183.0	205.0	208.0	169.7	262.6	181.3	188.3	179.7
July	193.1	155.0	220.2	220.8	216.4	228.6	181.9	260.6	178.8	203.0	202.0	204.2	168.5	263.6	180.8	182.0	179.7

¹ The Bureau of Labor Statistics retail food prices are obtained monthly during the first four days of the week containing the fifteenth of the month, through voluntary reports from chain and independent retail food dealers. Articles included are selected to represent food sales to moderate-income families.

The indexes, based on the retail prices of 61 foods, are computed by the fixed-base-weighted-aggregate method, using weights representing (1) relative importance of chain and independent store sales in computing city average prices; (2) food purchases by families of wage earners and moderate-income

workers, in computing city indexes; and (3) population weights, to combine city aggregates in order to derive average prices and indexes for all cities combined.

Indexes of retail food prices in 56 large cities combined, by commodity groups, for the years 1923 through 1943 (1935-39=100), may be found in Bulletin No. 799, "Retail Prices of Food—1942 and 1943," Bureau of Labor Statistics, U. S. Department of Labor, table 3, p. 15. Mimeograph tables of the same data, by months, January 1935 to date, are available upon request.

TABLE D-5: Indexes of Retail Prices of Foods by City

[1935-39=100]

City	July 1947	June 1947	May 1947	April 1947	Mar. 1947	Feb. 1947	Jan. 1947	Dec. 1946	Nov. 1946	Oct. 1946	Sept. 1946	Aug. 1946	July 1946	Aug. 1939
United States.....	193.1	190.5	187.6	188.0	189.5	182.3	183.8	185.9	187.7	180.0	174.1	171.2	165.7	93.5
Atlanta, Ga.....	194.5	193.0	190.3	194.6	199.6	187.5	187.5	188.7	192.0	177.5	173.4	174.1	161.5	92.5
Baltimore, Md.....	204.6	202.2	198.5	197.7	199.3	189.7	191.4	192.3	195.1	186.1	180.1	178.0	170.5	94.7
Birmingham, Ala.....	201.8	197.3	195.8	198.8	202.9	193.5	196.0	198.4	203.5	183.0	176.6	180.8	166.6	90.7
Boston, Mass.....	183.5	179.6	175.6	176.3	180.0	172.7	177.6	178.1	177.8	174.4	168.0	165.2	161.9	93.5
Bridgeport, Conn.....	187.7	186.9	180.8	180.4	184.6	178.5	180.0	180.7	179.5	175.9	168.9	164.3	158.7	93.2
Buffalo, N. Y.....	188.7	187.0	182.5	179.2	179.7	173.3	175.9	175.8	175.4	168.4	164.7	162.8	157.9	94.5
Butte, Mont.....	188.9	185.9	184.7	183.4	184.5	175.1	174.9	180.2	180.8	175.6	170.0	163.6	154.4	94.1
Cedar Rapids, Iowa ¹	203.7	203.2	197.3	197.3	195.6	190.0	188.6	192.7	192.1	184.8	180.0	174.6	171.8	-----
Charleston, S. C.....	190.6	188.3	187.0	188.0	189.2	181.5	180.5	184.2	188.2	173.0	170.4	173.2	161.9	95.1
Chicago, Ill.....	198.4	193.9	190.6	188.6	190.8	183.2	184.5	187.0	189.4	183.4	176.2	174.0	168.4	92.3
Cincinnati, Ohio.....	194.3	191.1	187.9	188.9	191.3	182.8	182.4	184.0	187.0	171.3	169.3	168.6	161.6	90.4
Cleveland, Ohio.....	199.7	198.3	194.3	196.0	195.1	186.9	189.1	191.4	193.1	183.1	179.3	178.6	171.3	93.6
Columbus, Ohio.....	179.3	178.4	176.6	176.2	177.0	170.0	171.6	174.0	179.4	171.6	161.9	160.3	153.1	88.1
Dallas, Texas.....	192.8	191.4	192.5	193.8	191.4	186.5	186.3	187.1	188.7	177.0	173.0	168.6	162.7	91.7
Denver, Colo.....	191.6	191.9	191.9	192.4	191.4	185.7	185.0	190.6	192.7	171.4	170.1	166.3	161.8	92.7
Detroit, Mich.....	191.4	188.5	182.7	182.7	183.0	175.1	176.5	179.2	181.6	173.9	168.4	168.5	166.9	90.6
Fall River, Mass.....	183.7	186.3	181.7	183.1	186.8	178.2	180.9	177.2	182.6	175.6	168.4	164.7	158.2	95.4
Houston, Tex.....	198.7	196.2	197.1	199.2	196.3	190.6	192.5	189.9	190.0	174.7	173.5	168.8	160.4	97.8
Indianapolis, Ind.....	191.7	188.7	185.1	187.9	187.8	179.9	180.0	184.3	187.3	175.9	172.4	170.8	159.9	90.7
Jackson, Miss. ¹	205.6	202.7	201.7	206.0	203.3	199.0	199.1	200.8	203.4	195.8	189.0	188.0	169.1	-----
Jacksonville, Fla.....	201.8	199.1	196.0	199.7	198.8	189.3	190.3	194.8	199.1	182.5	180.7	181.5	170.6	95.8
Kansas City, Mo.....	181.3	180.0	180.7	182.7	182.3	176.6	175.4	175.4	178.0	166.6	165.3	164.3	154.4	91.5
Knoxville, Tenn. ¹	225.8	223.0	216.8	223.4	225.2	213.9	216.4	220.4	226.5	201.5	197.8	203.7	186.4	-----
Little Rock, Ark.....	193.6	189.8	188.1	193.0	190.8	182.9	182.4	184.8	186.3	172.3	168.6	167.8	159.3	94.0
Los Angeles, Calif.....	193.8	193.3	196.7	195.7	195.5	194.1	194.3	195.1	198.1	182.8	176.5	175.1	171.2	94.6
Louisville, Ky.....	185.4	183.4	180.0	183.6	183.9	176.6	177.7	178.6	184.9	167.4	163.7	163.1	155.2	92.1
Manchester, N. H.....	192.6	190.3	185.1	184.0	186.8	177.5	183.6	186.7	185.6	176.9	170.0	168.7	161.5	94.9
Memphis, Tenn.....	210.1	205.1	201.6	204.6	205.1	198.6	200.2	206.0	207.3	191.0	185.3	187.5	174.6	89.7
Milwaukee, Wis.....	193.4	190.8	186.6	185.4	186.9	180.1	178.0	179.7	184.1	174.8	170.3	168.3	167.4	91.1
Minneapolis, Minn.....	182.5	182.6	179.0	179.6	181.3	174.6	174.0	180.2	181.7	177.6	167.9	163.3	160.9	95.0
Mobile, Ala.....	198.6	196.9	197.0	201.6	199.6	188.7	189.2	191.0	193.8	182.8	176.4	175.5	163.8	95.5
Newark, N. J.....	186.1	184.1	181.1	183.3	185.3	176.5	178.5	180.4	181.7	179.5	170.9	170.0	164.9	95.6
New Haven, Conn.....	187.8	186.4	180.5	178.5	181.4	174.1	177.3	179.1	179.0	173.9	166.8	163.7	160.6	93.7
New Orleans, La.....	207.2	203.7	201.1	204.0	204.3	199.1	199.7	202.4	207.4	196.0	190.7	188.8	180.6	97.6
New York, N. Y.....	191.7	187.9	184.8	187.3	189.5	182.1	183.5	186.1	188.6	186.7	178.8	171.0	168.9	95.8
Norfolk, Va.....	199.5	198.0	198.8	200.5	199.8	191.6	191.3	195.0	197.0	189.3	177.4	176.6	164.5	93.6
Omaha, Nebr.....	187.2	187.4	183.8	183.2	183.2	178.3	178.2	182.9	184.1	178.2	171.0	167.8	161.4	92.3
Peoria, Ill.....	205.5	201.7	195.1	198.3	197.2	183.9	187.1	186.2	190.3	188.9	183.8	183.5	172.2	93.4
Philadelphia, Pa.....	188.9	187.1	183.4	181.9	185.8	177.2	179.7	181.8	181.6	176.2	172.6	169.2	160.8	93.0
Pittsburgh, Pa.....	199.9	196.9	192.4	189.9	192.0	185.6	185.2	187.7	188.5	179.3	176.9	174.0	167.6	92.5
Portland, Maine.....	188.4	185.3	180.2	181.4	184.8	174.3	179.8	180.5	178.9	173.5	167.0	166.5	160.8	95.9
Portland, Oreg.....	202.7	199.7	200.8	201.4	198.1	191.2	192.8	196.0	194.8	183.7	184.5	182.1	175.8	96.1
Providence, R. I.....	199.3	194.2	186.1	185.5	189.8	180.5	183.8	184.0	186.7	184.1	175.9	173.4	165.3	93.7
Richmond, Va.....	188.4	185.8	186.3	188.3	188.8	182.1	181.5	186.5	188.2	175.9	167.4	164.1	154.0	92.2
Rochester, N. Y.....	187.4	185.2	180.5	178.4	180.3	174.3	177.4	176.8	176.9	172.5	165.7	165.5	160.6	92.3
St. Louis, Mo.....	200.9	196.8	193.4	195.2	198.9	188.4	187.4	189.3	191.8	183.6	174.5	175.5	169.7	93.8
St. Paul, Minn.....	179.3	178.5	176.8	176.6	179.1	172.3	173.1	177.7	180.1	176.2	164.6	161.6	159.0	94.3
Salt Lake City, Utah.....	192.2	192.6	189.3	189.2	186.8	184.1	183.9	190.6	191.9	180.6	175.4	171.8	166.4	94.6
San Francisco, Calif.....	200.4	196.9	199.9	201.7	199.5	195.4	200.6	204.6	205.2	191.4	186.5	180.6	172.1	93.8
Savannah, Ga.....	207.4	209.4	208.2	208.9	213.1	203.1	203.8	205.8	209.4	192.2	190.9	187.2	180.1	96.7
Scranton, Pa.....	196.1	194.9	189.2	188.0	188.9	182.6	180.9	185.2	185.6	182.5	174.0	171.2	168.4	92.1
Seattle, Wash.....	197.1	193.3	193.9	196.4	194.3	187.4	189.6	195.9	194.6	186.1	175.6	170.0	167.1	94.5
Springfield, Ill.....	205.9	203.5	200.2	201.7	202.3	194.5	193.4	191.6	194.9	181.7	179.8	181.1	174.1	94.1
Washington, D. C.....	190.2	190.9	187.8	189.4	190.3	181.3	183.7	186.1	186.8	180.6	174.7	169.9	164.8	94.1
Wichita, Kans. ¹	199.8	197.3	195.3	198.7	196.6	190.1	193.3	195.5	198.5	189.2	186.6	183.2	174.8	-----
Winston-Salem, N. C. ¹	195.0	194.4	191.8	197.2	199.2	189.6	192.6	195.3	200.0	184.3	179.2	177.4	164.6	-----

¹ June 1940=100.

* Not priced in earlier period.
 † Inadequate quotations.

TABLE D-7: Indexes of Wholesale Prices¹ by Group of Commodities for Selected Periods

[1926=100]

Year and month	All commodities	Farm products	Foods	Hides and leather products	Textile products	Fuel and lighting materials	Metals and metal products	Building materials	Chemicals and allied products	House-furnishings	Miscellaneous commodities	Raw materials	Semi-manufactured articles	Manufactured products	All commodities except farm products	All commodities except farm products and foods
1913: Average.....	69.8	71.5	64.2	68.1	57.3	61.3	90.8	56.7	80.2	56.1	93.1	68.8	74.9	69.4	69.0	70.0
1914: July.....	67.3	71.4	62.9	69.7	55.3	55.7	79.1	52.9	77.9	56.7	88.1	67.3	67.8	66.9	65.7	65.7
1918: November.....	136.3	150.3	128.6	131.6	142.6	114.3	143.5	110.8	178.0	99.2	142.3	138.8	162.7	130.4	131.0	129.9
1920: May.....	167.2	169.8	147.3	193.2	188.3	159.8	155.5	164.4	173.7	143.3	176.5	163.4	253.0	157.8	165.4	170.6
1920: Average.....	95.3	104.9	99.9	109.1	90.4	83.0	100.5	95.4	94.0	94.3	82.6	97.5	93.9	94.5	93.3	91.6
1932: Average.....	64.8	48.2	61.0	72.9	54.9	70.3	80.2	71.4	73.9	75.1	64.4	55.1	59.3	70.3	68.3	70.2
1939: Average.....	77.1	65.3	70.4	95.6	69.7	73.1	94.4	90.5	76.0	86.3	74.8	70.2	77.0	80.4	79.5	81.3
August.....	75.0	61.0	67.2	92.7	67.8	72.6	93.2	89.6	74.2	85.6	73.3	66.5	74.5	79.1	77.9	80.1
1940: Average.....	78.6	67.7	71.3	100.8	73.8	71.7	95.8	94.8	77.0	88.5	77.3	71.9	79.1	81.6	80.8	83.0
1941: Average.....	87.3	82.4	82.7	108.3	84.8	76.2	99.4	103.2	84.4	94.3	82.0	83.5	86.9	89.1	88.3	89.0
December.....	93.6	94.7	90.5	114.8	91.8	78.4	103.3	107.8	90.4	101.1	87.6	92.3	90.1	94.6	93.3	93.7
1942: Average.....	98.8	105.9	99.6	117.7	96.9	78.5	103.8	110.2	95.5	102.4	89.7	100.6	92.6	98.6	97.0	95.5
1943: Average.....	103.1	122.6	106.6	117.5	97.4	80.8	103.8	111.4	94.9	102.7	92.2	112.1	92.9	100.1	98.7	96.9
1944: Average.....	104.0	123.3	104.9	116.7	98.4	83.0	103.8	115.5	95.2	104.3	93.6	113.2	94.1	100.8	99.6	98.5
1945: Average.....	105.8	128.2	106.2	118.1	100.1	84.0	104.7	117.8	95.2	104.5	94.7	116.8	95.9	101.8	100.8	99.7
August.....	105.7	126.9	106.4	118.0	99.6	84.8	104.7	117.8	95.3	104.5	94.8	116.3	95.5	101.8	100.9	99.9
1946: Average.....	121.1	148.9	130.7	137.2	116.3	90.1	115.5	132.6	101.4	111.6	100.3	134.7	110.8	116.1	114.9	109.5
June.....	112.9	140.1	112.9	122.4	109.2	87.8	112.2	129.9	96.4	110.4	98.5	126.3	105.7	107.3	106.7	105.6
July.....	124.7	157.0	140.2	141.2	118.1	90.3	113.3	132.1	99.3	111.9	101.3	141.7	110.2	118.9	117.5	109.5
August.....	129.1	161.0	149.0	138.9	124.0	94.4	114.0	132.7	98.4	112.6	102.0	145.7	111.9	123.9	121.9	111.6
September.....	124.0	154.3	131.9	141.6	125.7	94.3	114.2	133.8	98.4	113.6	102.1	141.4	115.0	117.2	117.2	112.2
October.....	134.1	165.3	157.9	142.4	128.6	94.2	125.8	134.8	99.9	115.3	104.0	148.7	118.2	129.6	127.1	115.8
November.....	139.7	169.8	165.4	172.5	131.6	94.5	130.2	145.5	118.9	118.2	106.5	153.4	129.1	134.7	132.9	120.7
December.....	140.9	168.1	160.1	176.7	134.7	96.1	134.7	157.8	125.7	120.2	108.9	153.2	136.2	135.7	134.8	124.7
1947: January.....	141.5	165.0	156.2	175.1	136.6	97.7	138.0	169.7	128.1	123.3	110.3	152.1	138.8	136.7	136.1	127.6
February.....	144.5	170.4	162.0	173.8	138.0	97.9	137.9	174.8	129.3	124.6	110.9	154.9	142.1	139.7	138.6	128.5
March.....	149.5	182.6	167.6	174.6	139.6	100.7	139.9	177.5	132.2	125.8	115.3	163.2	145.9	143.3	142.1	131.1
April.....	147.7	177.0	162.4	166.4	139.2	103.4	140.3	178.8	133.2	127.8	115.7	160.1	144.5	141.9	141.0	131.8
May.....	147.1	175.7	159.8	170.8	138.9	103.3	141.4	177.0	127.1	128.8	116.1	158.6	144.9	141.7	140.6	131.9
June.....	148.0	177.9	161.8	173.2	138.9	103.9	142.6	175.2	120.2	129.2	115.8	160.2	145.9	142.3	141.2	132.0
July.....	150.8	181.4	167.1	178.4	139.5	107.9	143.8	176.5	118.8	129.8	116.6	164.7	147.0	144.7	143.9	133.8

¹ BLS wholesale price data, for the most part, represent prices in primary markets. They are prices charged by manufacturers or producers or are prices prevailing on organized exchanges. The weekly index is calculated from one-day-a-week prices; the monthly index from an average of these prices.

The indexes currently are computed by the fixed base aggregate method, with weights representing quantities produced for sale in 1929-31. (For a detailed description of the method of calculation see "Revised Method of Calculation of the Bureau of Labor Statistics Wholesale Price Index", in the Journal of the American Statistical Association, December 1937.)

Because of past differences in the method of computation the weekly and monthly indexes should not be compared directly. The weekly index is

useful only to indicate week-to-week changes and to provide later data on price movements. It is not revised to take account of more complete reports.

Mimeographed tables are available, upon request to the Bureau, giving monthly indexes for major groups of commodities since 1890 and for subgroups since 1913. Weekly indexes have been prepared since 1932.

² Includes current motor vehicle prices. The rate of production of motor vehicles in October 1946 exceeded the monthly average rate of civilian production in 1941, and in accordance with the announcement made in September 1946, the Bureau introduced current prices for motor vehicles in the October calculations. During the war motor vehicles were not produced for general civilian sale and the Bureau carried April 1942 prices forward in each computation through September 1946.

TABLE D-8: Indexes of Wholesale Prices¹ by Group of Commodities, by Weeks

[Indexes 1926=100. Not directly comparable with monthly data; see note below.]

Week ended	All commodities	Farm products	Foods	Hides and leather products	Textile products	Fuel and lighting materials	Metals and metal products	Building materials	Chemicals and allied products	House-furnishings	Miscellaneous commodities	Raw materials	Semi-manufactured articles	Manufactured products	All commodities except farm products	All commodities except farm products and foods
1947																
June 7.....	147.9	179.5	163.1	166.6	138.5	104.4	142.5	177.5	124.7	129.5	115.9	161.8	142.5	142.9	141.0	132.2
June 14.....	147.6	178.3	162.4	167.0	138.5	104.4	142.3	176.1	124.4	129.6	116.0	161.2	142.3	142.9	141.0	132.1
June 21.....	147.8	178.7	162.6	169.4	138.4	104.5	141.5	176.3	124.3	131.0	115.8	161.5	142.7	142.9	141.1	132.1
June 28.....	147.6	179.0	162.2	170.0	138.4	104.5	141.4	175.4	123.2	131.0	115.8	161.6	142.1	142.7	140.8	132.0
July 5.....	148.0	179.5	164.6	171.7	138.4	105.1	141.6	175.2	121.5	131.0	115.4	162.6	142.5	142.8	141.2	132.1
July 12.....	148.3	178.2	165.8	173.3	138.3	105.8	141.6	175.4	117.5	131.0	114.6	162.0	142.2	143.7	141.8	132.1
July 19.....	150.3	182.4	168.0	172.7	138.4	107.1	142.9	174.8	117.9	131.4	115.7	165.2	144.4	145.1	143.3	132.9
July 26.....	150.6	182.0	167.1	173.6	138.6	108.9	143.6	174.8	117.9	131.3	116.4	166.0	145.3	145.0	143.7	133.7
Aug. 2.....	151.3	180.8	168.0	174.5	139.0	109.7	146.1	176.6	116.9	131.4	116.8	165.6	147.2	146.0	144.8	134.7
Aug. 9.....	152.2	181.2	171.1	176.5	139.5	110.7	146.7	178.0	116.9	131.8	116.0	166.4	147.1	147.2	145.9	135.2
Aug. 16.....	152.7	181.4	172.3	177.8	139.7	111.0	146.7	178.9	117.2	132.0	115.5	166.8	147.2	147.8	146.5	135.4
Aug. 23.....	153.5	181.4	172.3	182.3	140.1	114.1	147.0	179.1	117.4	131.9	115.6	167.7	149.5	148.3	147.4	136.6
Aug. 30.....	154.0	181.7	172.1	183.3	140.1	114.2	149.8	179.3	117.6	131.9	115.9	167.9	149.9	148.9	147.9	137.3

¹ See footnote 1, table D-7.

TABLE D-9: Indexes of Wholesale Prices¹ by Group and Subgroup of Commodities

[1926=100]

Group and subgroup	1947							1946							1939
	July	June	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	Aug.	
All commodities.....	150.8	147.8	146.9	147.7	149.5	144.5	141.5	140.9	139.7	134.1	124.0	129.1	124.7	75.0	
Farm products.....	181.4	177.9	175.7	177.0	182.6	170.4	165.0	168.1	169.8	165.3	154.3	161.0	157.0	61.0	
Grains.....	202.3	206.0	202.4	199.8	203.3	171.1	162.6	163.0	165.4	174.2	170.6	169.0	181.4	51.5	
Livestock and poultry.....	209.9	200.9	198.7	199.2	216.0	201.5	189.6	194.7	197.4	174.6	150.4	177.6	162.9	66.0	
Other farm products.....	157.5	155.3	153.5	150.4	155.8	150.5	149.7	152.5	153.3	156.1	151.1	147.8	145.7	60.1	
Foods.....	167.1	161.8	159.8	162.4	167.6	162.0	156.2	160.1	165.4	157.9	131.9	149.0	140.2	67.2	
Dairy products.....	152.8	140.9	138.8	148.8	157.6	161.8	164.6	180.0	182.9	185.5	169.1	161.8	156.9	67.9	
Cereal products.....	154.7	149.2	151.7	154.1	150.4	141.3	139.9	139.5	136.1	128.5	127.4	124.7	124.9	71.9	
Fruits and vegetables.....	139.7	145.2	144.3	142.2	141.5	134.2	131.6	134.5	139.5	122.5	115.5	120.4	130.0	58.5	
Meats.....	217.9	208.6	203.0	196.7	207.3	199.5	183.4	188.2	202.8	191.4	131.3	198.1	169.9	73.7	
Other foods.....	141.7	139.7	138.4	147.6	152.8	146.0	141.1	139.0	141.4	136.2	115.5	114.9	109.4	60.3	
Hides and leather products.....	175.4	168.0	165.6	166.4	174.6	173.8	175.1	176.7	172.5	142.4	141.6	138.9	141.2	92.7	
Shoes.....	173.2	172.6	172.2	172.1	171.5	171.5	170.6	169.9	162.9	145.2	144.8	140.1	140.4	100.8	
Hides and skins.....	203.5	187.1	177.7	178.1	192.2	191.4	198.5	216.5	221.0	153.0	151.5	155.8	169.3	77.2	
Leather.....	187.4	157.1	154.5	158.0	183.7	181.1	181.6	185.0	178.1	138.5	138.5	133.3	133.2	84.0	
Other leather products.....	138.8	138.3	138.3	137.7	137.7	137.1	140.3	123.6	123.5	118.6	115.8	115.8	115.2	97.1	
Textile products.....	139.5	138.9	138.9	139.2	139.6	138.0	136.6	134.7	131.6	128.6	125.7	124.0	118.1	67.8	
Clothing.....	134.3	133.9	133.9	133.0	133.0	132.7	132.4	129.8	127.9	125.5	122.9	122.8	120.5	81.5	
Cotton goods.....	195.9	193.8	193.0	194.7	196.6	193.7	184.6	181.6	174.7	172.9	166.6	160.0	148.6	65.5	
Hosiery and underwear.....	100.4	100.8	100.8	100.8	100.8	100.0	99.3	96.9	89.3	88.8	88.7	87.7	76.3	61.5	
Rayon.....	37.0	37.0	37.0	37.0	37.0	37.0	33.8	33.8	32.0	30.2	30.2	30.2	30.2	28.5	
Silk.....	68.2	68.4	67.9	69.4	73.2	80.2	101.2	103.2	115.0	125.7	126.5	134.8	126.7	44.3	
Woolen and worsted goods.....	130.1	129.2	129.2	129.1	127.5	121.9	120.8	119.0	117.7	116.6	113.9	112.8	112.7	75.5	
Other textile products.....	171.2	173.8	176.1	175.8	175.1	170.1	169.9	168.1	161.3	130.6	126.7	121.7	113.5	63.7	
Fuel and lighting materials.....	107.9	103.9	103.3	103.4	100.7	97.9	97.7	96.1	94.5	94.2	94.3	94.4	90.3	72.6	
Anthracite.....	114.1	112.7	112.2	113.9	114.9	114.8	114.7	113.7	113.5	113.5	113.5	113.4	114.5	72.1	
Bituminous coal.....	158.0	145.6	145.1	145.0	143.6	143.3	142.6	138.9	137.4	137.2	137.0	136.7	136.1	96.0	
Coke.....	160.7	157.3	155.7	155.4	155.2	155.1	152.5	147.5	147.5	147.5	147.5	147.0	147.5	104.2	
Electricity.....	(²)	(²)	64.1	64.3	64.3	65.7	64.9	65.8	65.2	64.1	64.7	63.9	65.6	75.8	
Gas.....	(²)	85.8	85.0	84.0	84.9	84.3	80.8	83.1	84.4	80.8	80.6	79.5	80.7	86.7	
Petroleum and products.....	89.8	87.5	86.8	86.3	81.7	76.6	76.5	75.8	73.4	73.1	73.0	72.8	65.1	51.7	
Metals and metal products.....	143.8	142.6	141.4	140.3	139.9	137.9	138.0	134.7	130.2	125.8	114.2	114.0	113.3	93.2	
Agricultural implements.....	118.4	118.2	117.8	116.6	116.8	117.6	117.5	117.1	112.5	108.7	108.6	108.5	107.2	93.5	
Farm machinery.....	119.7	119.7	119.2	118.0	118.2	119.0	119.0	118.6	113.8	109.9	109.8	109.7	108.7	94.7	
Iron and steel.....	133.3	131.4	128.6	127.6	126.9	125.0	123.9	117.4	114.0	113.7	113.5	113.3	111.3	95.1	
Motor vehicles.....	150.3	149.4	149.3	148.8	149.2	149.3	151.3	151.0	148.2	143.6	(²)	(²)	(²)	92.5	
Nonferrous metals.....	141.8	142.9	143.9	141.0	139.0	131.3	130.5	129.3	118.4	101.8	101.4	101.4	102.7	74.6	
Plumbing and heating.....	123.4	119.1	120.0	118.2	117.9	117.1	117.0	114.9	107.2	107.2	107.2	106.3	106.0	79.3	
Building materials.....	176.5	175.2	177.0	178.8	177.5	174.8	169.7	157.8	145.5	134.8	133.8	132.7	132.1	89.6	
Brick and tile.....	143.3	154.7	134.5	134.5	132.4	132.3	132.2	130.0	129.1	127.8	127.7	126.0	122.5	90.5	
Cement.....	114.9	114.3	114.0	114.0	112.3	109.9	108.3	106.9	107.0	106.5	106.5	105.8	104.0	91.3	
Lumber.....	269.0	266.1	269.4	273.5	269.3	263.6	249.9	227.2	192.1	178.9	178.2	177.6	177.3	90.1	
Paint and paint materials.....	160.4	163.9	169.0	175.5	176.1	173.9	171.2	155.4	151.3	119.2	116.7	113.9	114.9	82.1	
Plumbing and heating.....	123.4	119.1	120.0	118.2	117.9	117.1	117.0	114.9	107.2	107.2	107.2	106.3	106.0	79.3	
Structural steel.....	130.8	127.7	127.7	127.7	127.7	127.7	127.7	120.1	120.1	120.1	120.1	120.1	120.1	107.3	
Other building materials.....	146.1	145.1	144.8	143.7	143.5	141.5	139.0	131.8	125.3	122.5	121.4	120.9	119.9	89.5	
Chemicals and allied products.....	118.8	120.2	127.1	133.2	132.2	129.3	128.1	125.7	118.9	99.9	98.4	98.4	99.3	74.2	
Chemicals.....	119.9	118.7	118.7	119.5	114.5	113.8	112.7	111.8	106.9	98.8	98.6	98.4	98.5	83.8	
Drug and pharmaceutical materials.....	137.4	156.1	173.6	181.0	182.7	182.5	181.7	181.2	152.8	111.5	110.3	110.1	112.6	77.1	
Fertilizer materials.....	103.5	101.8	102.5	101.2	101.8	99.2	99.9	95.1	96.3	91.9	90.2	94.4	88.2	65.5	
Mixed fertilizers.....	97.2	96.8	96.7	96.7	96.3	96.3	95.5	93.6	91.1	90.5	90.0	87.7	86.6	73.1	
Oils and fats.....	134.8	139.2	179.9	220.1	231.5	214.3	210.6	203.0	191.0	111.1	103.3	102.5	114.2	40.6	
Housefurnishing goods.....	129.8	129.2	128.8	127.8	125.8	124.6	123.3	120.2	118.2	115.3	113.6	112.6	111.9	85.6	
Furnishings.....	138.1	137.2	136.9	135.2	131.4	129.6	128.4	126.3	124.4	121.3	119.4	118.5	117.3	90.0	
Furniture.....	121.1	120.9	120.3	120.0	120.0	119.5	118.2	113.9	111.8	109.2	107.5	106.6	106.4	81.1	
Miscellaneous.....	116.6	115.8	116.1	115.7	115.3	110.9	110.3	108.9	106.5	104.0	102.1	102.0	101.3	73.3	
Automobile tires and tubes.....	(²)	73.0	73.0	73.0	73.0	73.0	73.0	73.0	73.0	73.0	73.0	73.0	73.0	60.5	
Cattle feed.....	209.4	253.3	237.4	208.9	238.4	178.6	181.7	193.8	210.8	217.2	201.8	221.1	246.3	68.4	
Paper and pulp.....	157.2	154.2	154.3	152.5	145.1	143.4	141.9	136.4	127.7	124.6	121.9	119.6	117.1	80.0	
Rubber, crude.....	34.6	37.1	45.6	52.0	52.9	52.9	51.2	46.2	46.2	46.2	46.2	46.2	46.2	34.9	
Other miscellaneous.....	121.2	121.7	122.1	123.3	122.2	118.8	118.1	117.0	113.3	108.2	106.5	105.0	101.9	81.3	

¹ See footnote 1, table D-7.² Not available.³ See footnote 2, table D-7.⁴ In process of revision.

E: Work Stoppages

TABLE E-1: Work Stoppages Resulting From Labor-Management Disputes ¹

Month and year	Number of stoppages		Workers involved in stoppages		Man-days idle during month or year	
	Beginning in month or year	In effect during month	Beginning in month or year	In effect during month	Number	Percent of estimated working time
1935-39 (average).....	2,862		1,130,000		16,900,000	0.27
1945.....	4,750		3,470,000		38,000,000	.47
1946.....	4,985		4,600,000		116,000,000	1.43
1946: July.....	563	910	228,000	408,000	3,970,000	.58
August.....	560	965	227,000	425,000	3,900,000	.56
September.....	499	853	356,000	499,000	4,880,000	.77
October.....	516	848	307,000	467,000	6,220,000	.85
November.....	344	677	435,000	707,000	4,980,000	.77
December.....	168	402	76,400	500,000	3,130,000	.46
1947: January ²	320	475	105,000	165,000	1,375,000	.2
February ²	290	475	75,000	150,000	1,240,000	.2
March ²	330	525	100,000	165,000	1,100,000	.2
April ²	460	625	600,000	650,000	7,750,000	1.1
May ²	425	650	200,000	625,000	5,700,000	.8
June ²	350	600	475,000	625,000	3,750,000	.6
July ²	300	500	500,000	650,000	4,200,000	.5

¹ All known work stoppages, arising out of labor-management disputes, involving six or more workers and continuing as long as a full day or shift are included in reports of the Bureau of Labor Statistics. Figures on "man-days idle" and "workers involved" cover all workers made idle in establishments directly involved in a stoppage. They do not measure the indirect or

secondary effects on other establishments or industries whose employees are made idle as a result of material or service shortages.

² Preliminary estimates. Figures for early months of 1947 revised but not final.

F: Building and Construction

TABLE F-1: Estimated Construction Expenditures, by Type of Construction ¹

Type of construction	Estimated expenditures (in millions)													
	1947								1946				1946	1939
	Aug. ²	July ²	June ²	May ²	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	Total
Total construction.....	\$1,405	\$1,340	\$1,241	\$1,117	\$1,028	\$954	\$913	\$966	\$1,054	\$1,151	\$1,243	\$1,237	\$1,223	\$11,694
New construction ⁴	1,212	1,153	1,065	955	876	826	795	839	905	987	1,070	1,066	1,056	9,890
Private construction.....	909	865	806	722	662	648	634	666	711	745	788	800	809	7,739
Residential building (nonfarm).....	443	421	384	342	306	285	284	300	320	335	347	356	347	3,183
Nonresidential building (nonfarm) ⁵	266	261	255	245	240	247	260	275	296	308	318	315	321	3,350
Industrial.....	139	139	140	141	142	146	152	159	166	171	171	167	159	1,689
Commercial.....	76	74	70	61	55	57	62	69	80	86	93	95	107	1,114
All other.....	51	48	45	43	44	46	47	50	51	54	53	55	54	547
Farm construction.....	75	60	50	40	30	20	10	10	10	20	40	50	60	350
Public utilities.....	125	123	117	95	86	96	80	81	85	82	83	79	81	856
Public construction.....	303	288	259	233	214	178	161	173	194	242	282	266	247	2,181
Residential building.....	10	8	6	9	16	24	33	39	51	68	66	54	42	387
Nonresidential building (except military and naval facilities).....	46	44	42	41	41	36	32	33	23	27	32	35	32	319
Industrial facilities ⁶	2	2	2	3	4	3	3	5	5	7	9	9	7	84
All other.....	44	42	40	38	37	33	29	28	18	20	23	26	25	235
Military and naval facilities.....	19	19	15	15	12	12	12	16	17	20	16	18	18	188
Highways.....	135	130	117	95	75	48	34	37	57	76	99	93	91	706
Other public.....	93	87	79	73	67	58	50	52	47	54	65	68	64	551
Federal ⁷	48	43	36	35	29	25	23	24	23	27	32	32	30	270
State and local ⁸	45	44	43	38	38	33	27	28	24	27	33	36	34	281
Minor building repairs.....	193	187	176	162	152	128	118	127	149	164	173	171	167	1,804
Residential (nonfarm) ⁹	65	64	60	54	47	36	33	32	35	43	47	47	47	521
Nonresidential (nonfarm) ⁹	65	65	62	58	55	52	50	55	60	63	66	69	70	753
Farm construction ¹⁰	63	58	54	50	50	40	35	40	54	58	60	55	50	530

¹ Estimated construction expenditures represent the monetary value of the volume of work accomplished during the given period of time in continental United States. These figures should be differentiated from data on value of construction reported in the tables on urban building and Federal construction.

² Preliminary.

³ Revised.

⁴ Joint estimates by the Bureau of Labor Statistics, U. S. Department of Labor, and the Office of Domestic Commerce, Department of Commerce.

New construction includes expenditures for major additions and alterations.

⁵ Excludes nonresidential building by privately owned public utilities.

⁶ Expenditures for facilities to produce atomic bombs are excluded.

⁷ Mainly river, harbor, flood control, reclamation, and power projects.

⁸ Includes water supply, sewage disposal, and miscellaneous public service enterprises.

⁹ Covers privately financed structural repairs of the type for which building permits are generally required.

¹⁰ Covers maintenance and repairs.

TABLE F-2: Value of Contracts Awarded and Force-Account Work Started on Federally Financed Construction, by Type of Project¹

Period	Valuation (in thousands)									
	All types of projects	Airports ²	Buildings ³		Conservation and development		Electrifi- cation ⁴	Highways, streets, and roads	Water and sewage	All other types ⁵
			Residen- tial	Nonresi- dential	Reclama- tion	River, harbor, and flood control				
1936.....	\$1,533,439	(*)	763,465	8407,929	\$73,797	\$115,913	\$14,878	\$511,685	\$154,807	\$100,965
1939.....	1,586,604	4,753	231,071	438,151	115,612	109,811	29,775	355,701	118,131	183,599
1942.....	7,775,497	579,176	549,472	5,580,917	150,708	67,087	32,538	347,988	152,343	315,268
1946.....	1,450,237	14,859	435,453	114,203	169,253	131,152	4,541	535,784	13,231	31,761
1946: July.....	187,184	828	76,768	12,959	31,002	5,254	399	50,766	8,168	1,040
August.....	143,221	282	56,495	1,784	975	29,661	0	52,211	68	1,745
September.....	97,757	358	36,475	6,120	671	932	0	52,666	418	117
October.....	94,793	261	1,147	2,769	32,909	2,027	0	55,480	169	31
November.....	45,680	2,012	294	8,702	5,263	635	80	28,593	0	101
December.....	51,043	122	294	7,898	672	1,908	233	39,966	0	50
1947: January.....	51,043	2,159	388	35,903	2,447	19,231	475	25,561	20	458
February.....	57,972	237	2,595	10,442	5,188	4,220	589	34,529	172	0
March.....	92,913	340	5,197	8,942	13,803	21,082	414	42,388	46	701
April.....	122,646	387	7,035	16,512	7,892	16,912	312	72,218	753	625
May ⁶	120,096	1,384	5,968	14,486	4,443	27,148	182	64,242	2,217	662
June ⁷	175,885	5,466	21,248	35,919	11,572	38,923	892	57,177	2,698	1,990
July ⁸	67,169	163	409	4,488	1,276	2,010	175	57,845	40	863

¹ Covers projects financed wholly or partially from Federal funds. Excludes off-continent construction beginning with January 1941. Projects classified as secret by the military are excluded.

² Excludes hangars and other buildings, which are included under building construction.

³ Includes additions, alterations, and repairs.

⁴ Data differ from those published previously due to the exclusion of loans granted by The Rural Electrification Administration.

⁵ Covers forestry, railroad construction, and other types of heavy engineering projects, not elsewhere classified.

⁶ Included in "All other types."

⁷ Includes nonresidential construction at the site of three Resettlement Administration projects for which a break-down of residential and nonresidential costs is not available.

⁸ See footnote 7.

⁹ Revised.

¹⁰ Preliminary.

TABLE F-3: Estimated Permit Valuation¹ of Urban Building Construction Scheduled To Be Started, by Class of Construction and by Source and Funds²

Valuation (in thousands)													
Period	All building construction			New residential building ¹			New nonresidential building			Additions, alterations, and repairs			
	Total	Non-Federal	Federal	Total	Non-Federal		Federal	Total	Non-Federal	Federal	Total	Non-Federal	Federal
					Private	Public							
1942.....	\$2,704,239	\$1,066,092	\$1,638,147	\$915,079			\$313,336	\$1,510,688	\$222,998	\$1,287,690	\$278,472	\$241,351	\$37,121
1946.....	4,728,080	4,290,600	437,480	2,501,162	2,147,256	54,788	299,118	1,457,142	1,415,071	42,071	769,776		
1946: June.....	411,512	347,480	64,032	242,760	188,787	8,810	45,163	106,200	104,502	1,698	62,552	54,191	8,361
July.....	413,758	348,475	65,283	237,781	183,537	9,060	45,184	110,030	105,362	4,668	65,947	59,576	6,371
August.....	424,653	350,754	73,899	263,847	194,962	25,390	43,495	92,119	92,188	11	68,607	63,604	5,003
September.....	347,022	316,304	30,718	193,498	173,775	0	19,723	94,671	89,707	4,964	58,853	52,822	6,031
October.....	337,351	324,509	12,842	193,991	184,198	8,441	1,352	85,259	83,986	1,273	58,101	56,325	1,776
November.....	272,745	263,253	9,492	149,863	149,581	0	282	81,507	73,091	8,416	41,375	40,581	794
December.....	229,809	221,059	8,750	109,101	109,101	0	0	78,514	70,792	7,722	42,194	41,166	1,028
1947: January.....	265,583	249,886	15,697	132,444	125,180	7,264	0	83,506	76,522	6,984	49,633	48,184	1,449
February.....	277,060	269,286	7,774	139,793	139,793	0	0	86,376	79,562	6,814	50,891	49,931	960
March.....	382,344	372,665	9,779	207,967	206,381	1,586	0	109,887	102,830	7,057	64,490	63,354	1,136
April.....	440,289	429,276	11,013	241,815	239,866	0	1,949	123,558	115,920	7,638	74,916	73,490	1,426
May.....	427,406	418,614	8,792	227,947	227,947	0	0	126,734	120,201	6,533	72,725	70,466	2,259
June.....	474,929	460,099	14,830	261,145	254,628	3,857	2,660	133,753	129,424	4,329	80,031	76,047	3,984
First 6 months of 1946 ⁴	2,702,742	2,466,246	236,496	1,353,081	1,152,102	11,898	189,081	914,962	899,945	15,017	434,699	414,199	20,500
First 6 months of 1947 ⁵	2,267,612	2,199,727	67,885	1,211,111	1,193,795	12,707	4,609	663,814	624,459	39,355	392,687	381,473	11,214

¹ Includes value of Federal construction contracts awarded and estimates for building to be started in urban places which do not issue permits.

² Estimates of non-Federal (private and State and local government) urban building construction are based upon building permit reports received from places containing about 85% of the urban population of the United States; estimates of Federally financed projects are compiled from notifications of construction contracts awarded which are obtained from other

Federal agencies. Urban, as defined by the Bureau of the Census, covers all incorporated places of 2,500 population or more in 1940 and, by special rule, a small number of incorporated civil divisions.

³ Includes value of dormitories, hotels, and other nonhousekeeping residential buildings in addition to housekeeping units shown in table F-4.

⁴ Revised.

⁵ Preliminary.

TABLE F-4: Estimated Number and Valuation¹ of New Dwelling Units Scheduled To Be Started in Urban Areas,² by Type of Dwelling and by Source of Funds

Period	Number of new family-dwelling units						Valuation (in thousands)					
	All dwellings	Publicly financed	Privately financed				All dwellings	Publicly financed	Privately financed			
			Total	1-family	2-family ³	Multi-family ⁴			Total	1-family	2-family ³	Multi-family ⁴
1942.....	280,838	95,946	184,892	138,908	15,747	30,237	\$895,511	\$296,933	\$598,578	\$478,665	\$42,629	\$77,284
1946.....	528,755	98,737	430,018	358,126	24,271	47,621	2,445,773	331,887	2,113,886	1,830,395	102,754	180,737
1946: June.....	52,062	13,932	38,130	31,388	2,156	4,586	237,391	50,190	187,201	160,038	9,204	17,959
July.....	52,178	14,212	37,966	31,170	1,980	4,816	230,008	48,720	181,288	157,833	8,218	15,237
August.....	55,106	16,446	38,660	32,921	1,943	3,796	257,755	64,285	193,470	168,555	8,654	16,261
September.....	42,563	7,519	35,044	29,335	2,050	3,659	191,455	18,777	172,678	150,795	8,960	12,923
October.....	37,401	1,334	36,067	29,576	1,899	4,592	193,385	9,792	183,593	156,482	8,290	18,821
November.....	28,661	122	28,539	23,747	1,594	3,198	149,579	282	149,297	126,948	7,397	14,952
December.....	21,360	0	21,369	17,469	977	2,923	108,284	0	108,284	92,385	4,447	11,452
1947: January.....	25,383	1,084	24,299	20,537	1,496	2,266	131,771	7,264	124,507	108,433	6,342	9,732
February.....	27,074	0	27,074	22,156	1,615	3,303	138,443	0	138,443	118,613	6,375	13,455
March.....	37,649	491	37,158	30,615	2,448	4,095	206,511	1,586	204,925	176,084	10,763	18,078
April.....	42,862	328	42,534	35,214	3,142	4,178	240,390	1,949	238,441	202,847	13,478	22,116
May.....	41,138	0	41,138	33,670	3,085	4,383	224,951	0	224,951	189,254	14,068	21,629
June.....	47,010	1,005	46,005	34,576	3,542	7,887	252,906	6,517	252,906	198,023	14,434	40,449
First 6 months of 1946 ⁵	291,477	59,104	232,373	193,908	13,828	24,647	1,315,307	190,031	1,125,276	977,397	56,788	91,091
First 6 months of 1947 ⁶	221,116	2,908	218,208	176,768	15,328	26,112	1,194,972	17,316	1,184,173	993,254	65,460	125,459

¹ Includes value of Federal construction contracts awarded and estimates for building to be started in urban places which do not issue permits.

² See table F-3, footnote 2.

³ Includes 1- and 2-family dwellings with stores.

⁴ Includes multifamily dwelling units with stores.

⁵ Preliminary.

⁶ Revised.

TABLE F-5: Estimated Permit Valuation¹ of New Nonresidential Building Scheduled To Be Started in Urban Areas,² by Type and by Source of Funds

Period	Valuation (in thousands)													
	New nonresidential buildings		Industrial buildings ³		Commercial buildings ⁴		Community buildings ⁵		Government buildings ⁶		Public works and utility buildings ⁷		All other buildings ⁸	
	Total (including Federal)	Non-Federal	Total (including Federal)	Non-Federal	Total (including Federal)	Non-Federal	Total (including Federal)	Non-Federal	Total (including Federal)	Non-Federal	Total (including Federal)	Non-Federal	Total (including Federal)	Non-Federal
1946.....	\$1,457,142	\$1,415,071	\$396,923	\$395,250	\$669,498	\$669,498	\$190,098	\$167,327	\$12,042	\$3,624	\$101,241	\$92,032	\$87,340	\$87,340
1946: June.....	106,200	104,502	34,118	34,063	34,840	34,840	19,602	19,448	1,817	328	9,714	9,714	6,109	6,109
July.....	110,030	105,362	32,009	32,009	44,777	44,777	19,871	15,271	359	288	5,864	5,864	7,153	7,153
August.....	92,199	92,188	21,779	21,779	38,851	38,851	15,453	15,453	212	201	7,489	7,489	8,415	8,415
September.....	94,671	89,707	33,262	33,110	30,939	30,939	15,276	10,464	492	492	6,447	6,447	8,255	8,255
October.....	85,259	83,986	21,123	21,123	35,264	35,264	14,049	12,793	170	153	6,422	6,422	8,231	8,231
November.....	81,507	73,091	20,944	20,944	23,267	23,267	16,168	7,752	321	321	14,585	14,585	6,222	6,222
December.....	78,514	70,792	22,665	22,665	24,328	24,328	15,643	12,336	157	157	6,968	6,968	4,338	4,338
1947: January.....	83,506	76,522	22,889	22,889	31,439	31,439	16,323	9,339	257	257	7,719	7,719	4,879	4,879
February.....	86,376	79,562	20,080	20,080	30,785	30,785	17,727	11,033	659	539	10,136	10,136	6,989	6,989
March.....	109,887	102,830	26,813	26,813	38,780	38,780	26,310	19,322	388	319	10,665	10,665	6,931	6,931
April.....	123,558	115,920	22,907	22,907	45,458	45,458	24,461	21,598	7,399	2,624	13,883	13,883	9,450	9,450
May.....	126,734	120,201	25,366	25,366	47,863	47,863	28,155	24,015	3,246	853	12,157	12,157	9,947	9,947
June.....	134,023	129,695	28,306	28,306	54,806	54,806	28,109	28,001	5,415	1,195	8,295	8,295	9,092	9,092
First 6 months of 1946.....	914,962	899,945	245,141	243,620	472,072	472,072	93,638	93,258	10,333	2,012	49,051	44,257	44,726	44,726
First 6 months of 1947.....	664,084	624,730	146,361	146,361	249,131	249,131	141,085	113,308	17,364	5,757	62,855	62,855	47,288	47,288

¹ Includes value of Federal construction contracts awarded and estimates for building to be started in urban places which do not issue permits. Urban, as defined by the Bureau of the Census, covers all incorporated places of 2,500 population or more in 1940 and, by special rule, a small number of incorporated civil divisions.

² Estimates of non-Federal (private and State and local government) building in all urban areas are based upon building permit reports received from places containing about 85 percent of the urban population of the country; estimates of federally financed projects are compiled from notifications of construction contracts awarded, which are obtained from other Federal agencies.

³ Includes factories, navy yards, army ordnance plants, bakeries, ice plants, industrial warehouses, and other buildings at the site of these and similar production sites.

⁴ Includes amusement and recreation buildings, stores and other mercantile buildings, public garages, gasoline and service stations, etc.

⁵ Includes churches, hospitals, and other institutional buildings, schools, libraries, etc.

⁶ Includes Federal, State, county, and municipal buildings, such as post offices, city halls, fire and police stations, army barracks, naval stations, etc.

⁷ Includes railroad, bus, and airport buildings, roundhouses, radio stations, gas and electric plants, public comfort stations, etc.

⁸ Includes private garages, sheds, stables and barns, and other buildings not elsewhere classified.

Preliminary.

TABLE F-6: Estimated Number of New Dwelling Units Started and Completed in Nonfarm Areas¹

Period	New family dwelling units									
	Total	Permanent ¹			Tempo- rary ²	Total	Permanent ²			Tempo- rary ⁴
		Total	Private	Public			Total	Private	Public	
	Started					Completed				
1946: Total.....	778,000	670,500	662,500	8,000	107,500	³ 476,400	437,800	437,800	(⁵)	³ 38,600
January.....	42,600	37,500	36,900	600	5,100	15,900	15,900	15,900	0	0
February.....	49,800	42,400	42,400	0	7,400	17,300	17,300	17,300	0	0
March.....	70,500	62,000	62,000	0	8,500	18,700	18,700	18,700	0	0
April.....	80,300	67,000	67,000	0	13,300	21,000	21,000	21,000	0	0
May.....	83,400	67,100	67,100	0	16,300	25,100	25,100	25,100	0	0
June.....	79,900	64,100	62,800	1,300	15,800	30,600	30,600	30,600	0	0
July.....	78,500	62,600	61,300	1,300	15,900	36,700	36,700	36,700	0	0
August.....	81,700	65,400	61,900	3,500	16,300	43,400	43,400	43,400	0	0
September.....	66,000	57,600	57,600	0	8,400	49,700	49,700	49,700	0	0
October.....	68,200	57,800	56,500	1,300	400	55,500	55,500	55,500	0	0
November.....	47,800	47,700	47,700	0	100	61,200	61,200	61,200	0	0
December.....	39,300	39,300	39,300	0	(⁶)	62,700	62,700	62,700	(⁶)	0
1947: January.....	40,100	40,100	39,000	1,100	0	78,600	62,600	62,600	0	16,000
February.....	44,100	44,100	44,100	0	0	75,800	60,300	60,300	(⁵)	15,500
March.....	58,400	58,400	58,400	0	0	72,700	57,700	57,700	0	15,000
April.....	68,700	68,700	68,700	0	0	65,900	59,500	59,400	100	6,400
May.....	72,700	72,500	72,500	0	200	62,500	59,900	59,900	0	2,600
June.....	79,200	77,200	77,000	200	2,000	66,800	63,000	62,800	200	3,800
July ⁷	80,000	80,000	80,000	0	0	65,700	65,400	65,400	300	0

¹ Estimates of equivalent living accommodations provided by the conversion of family units, dormitories, and trailers previously shown in this table have been discontinued because of the paucity of data.

² Covers both conventional and prefabricated units.

³ Starts data for 1946 cover only those family dwelling units in the Federal temporary re-use housing program which were provided by dismantling temporary war structures and their re-erection at new sites. Starts data for

1947 cover new temporary housing projects outside of the Federal temporary re-use program.

⁴ Covers only those family dwelling units in the Federal temporary re-use housing program which were provided by dismantling temporary war structures and their re-erection at new sites.

⁵ Monthly data not available.

⁶ Less than 50 units.

⁷ Preliminary.

TABLE F-7: Estimated Number and Average Construction Cost of Privately Financed Dwelling Units Started in 29 Leading Industrial Areas¹

Industrial area ²	Number of dwelling units started												
	1947					1946							
	May	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May
Atlanta.....	595	487	415	345	365	435	460	590	655	565	675	775	615
Boston.....	875	587	830	530	245	325	450	495	355	385	655	550	555
Buffalo.....	425	345	240	205	155	170	170	280	200	345	240	580	270
Chicago.....	1,703	1,342	1,190	700	230	1,105	1,485	1,410	1,225	2,005	2,300	2,220	1,565
Cleveland.....	615	493	610	400	300	410	515	770	735	670	555	460	655
Columbus.....	248	250	275	185	180	140	205	370	225	285	320	170	315
Dallas.....	748	842	540	505	335	245	425	425	675	375	540	520	480
Denver.....	312	354	270	270	275	380	330	565	525	635	680	735	730
Detroit.....	1,528	1,615	1,505	810	615	780	1,195	1,195	1,355	1,500	1,425	1,455	2,010
Fort Worth.....	474	457	400	455	210	180	250	330	340	395	335	340	365
Hartford.....	272	258	160	65	65	110	110	65	120	140	140	130	170
Indianapolis.....	299	260	230	130	160	150	165	270	260	405	270	240	240
Knoxville.....	201	166	125	95	95	120	155	315	210	220	225	295	300
Los Angeles.....	4,643	5,096	5,040	5,675	3,855	4,630	4,095	3,965	4,980	5,135	4,255	4,390	5,910
Memphis.....	331	508	380	415	225	220	420	355	270	365	465	380	355
Milwaukee.....	517	387	120	105	195	220	360	425	305	475	310	545	625
Minneapolis-St. Paul.....	587	418	195	210	210	410	495	580	585	715	600	780	765
New York-Newark-Jersey City ⁴	2,454	1,600	2,495	1,810	2,865	2,030	3,270	3,640	4,305	4,545	3,440	3,905	3,700
Philadelphia-Camden.....	1,481	896	805	375	350	385	855	775	730	1,005	1,200	1,315	1,135
Pittsburgh.....	775	849	455	185	280	370	380	390	720	530	500	495	510
Sacramento.....	266	330	315	325	350	175	280	265	365	365	300	330	350
San Francisco.....	1,266	1,664	1,790	1,505	1,570	945	1,365	1,85	1,610	1,520	1,405	1,960	1,760
Seattle-Tacoma.....	(⁵)	(⁵)	670	410	375	430	360	700	850	900	755	860	920
Springfield-Holyoke.....	185	135	65	40	30	85	85	70	100	120	115	135	150
St. Louis.....	692	671	495	405	310	325	330	490	660	630	700	495	795
Syracuse.....	140	124	50	10	5	15	110	95	125	135	140	45	100
Toledo.....	104	95	105	60	40	45	65	110	135	115	(⁵)	(⁵)	(⁵)
Washington, D. C.....	1,589	1,296	1,230	986	719	705	870	1,230	800	1,020	785	1,065	1,155
Worcester.....	224	208	120	30	15	55	90	95	155	150	195	195	215
Youngstown ⁴	(⁵)	(⁵)	(⁵)	60	70	55	100	65	170	100	145	120	160

Average construction cost per dwelling unit started ³													
Atlanta.....	\$5,900	\$5,600	\$5,450	\$5,900	\$5,500	\$5,100	\$5,000	\$5,100	\$5,100	\$5,200	\$5,600	\$4,100	\$4,900
Boston.....	7,100	7,200	6,800	6,000	7,700	7,400	7,300	6,700	8,500	7,400	7,500	7,500	7,300
Buffalo.....	7,700	8,600	8,000	7,900	6,900	6,900	6,800	7,300	7,200	7,200	6,000	6,100	5,800
Chicago.....	8,800	8,500	8,700	8,700	8,300	7,700	7,800	8,700	8,100	7,700	7,800	7,600	7,600
Cleveland.....	9,600	9,300	9,200	8,800	8,800	9,100	9,100	8,400	8,400	8,300	8,000	10,500	9,000
Columbus.....	7,700	8,000	7,900	8,600	7,700	7,900	7,700	7,300	7,000	6,300	7,000	7,000	7,100
Dallas.....	5,800	5,600	5,700	5,600	5,900	6,400	6,500	6,100	6,000	6,800	6,600	6,300	6,400
Denver.....	4,900	5,700	5,700	5,600	5,400	5,700	5,800	5,700	5,700	5,700	5,700	5,400	7,300
Detroit.....	8,000	8,600	8,500	9,400	9,800	7,300	7,700	8,400	7,600	6,900	6,300	6,400	5,000
Fort Worth.....	4,800	4,800	4,500	4,300	4,000	5,900	4,200	3,200	3,000	3,200	3,500	4,500	8,100
Hartford.....	7,600	7,500	7,600	8,100	9,000	8,400	7,400	7,200	7,400	7,000	7,300	7,100	8,000
Indianapolis.....	6,000	6,200	5,600	6,700	5,900	5,300	5,400	4,900	5,300	5,600	6,500	5,800	5,300
Knoxville.....	4,600	4,600	4,300	4,900	4,800	4,700	4,300	4,700	4,400	3,900	3,700	4,300	5,000
Los Angeles.....	6,600	6,800	6,700	6,700	6,600	6,700	6,700	6,800	6,600	6,900	6,600	6,200	6,000
Memphis.....	4,300	4,300	4,200	4,900	4,300	4,500	4,900	4,500	4,400	4,600	4,400	5,300	4,600
Milwaukee.....	7,500	7,700	8,600	7,800	7,300	8,100	7,100	7,800	7,500	6,100	7,500	8,000	7,600
Minneapolis-St. Paul.....	8,000	8,200	8,200	7,600	9,000	7,900	8,000	7,600	7,200	7,200	7,100	7,600	7,100
New York-Newark-Jersey City ⁴	7,900	9,100	7,400	7,400	7,000	8,100	7,400	7,600	7,700	7,000	7,300	6,900	7,400
Philadelphia-Camden.....	7,000	6,900	6,700	6,700	7,100	7,300	6,700	6,700	6,800	6,800	6,700	6,700	6,700
Pittsburgh.....	7,300	6,500	7,300	7,100	7,300	7,400	7,600	7,100	6,300	5,900	6,300	5,300	7,400
Sacramento.....	5,700	5,400	3,900	4,000	4,800	4,400	4,700	4,700	5,100	5,400	5,800	4,800	4,200
San Francisco.....	7,600	7,500	8,100	8,000	7,900	7,700	7,600	7,400	6,600	6,700	7,800	7,300	7,200
Seattle-Tacoma.....	(⁵)	(⁵)	6,100	6,600	5,200	6,300	6,900	5,400	5,800	6,000	6,000	5,900	5,900
Springfield-Holyoke.....	6,600	7,000	6,700	6,900	6,600	7,100	6,400	6,300	6,500	5,000	6,400	6,100	5,100
St. Louis.....	6,900	6,800	6,900	6,600	6,600	6,800	8,900	6,700	5,400	6,000	7,100	4,600	6,300
Syracuse.....	7,900	8,400	8,300	7,900	9,700	9,200	9,000	6,900	5,900	6,800	6,100	6,500	7,700
Toledo.....	6,600	8,100	7,900	8,200	7,300	8,000	7,100	6,700	6,900	7,500	(⁵)	(⁵)	(⁵)
Washington, D. C.....	8,200	8,500	8,300	8,100	7,600	7,500	7,700	6,600	6,600	7,900	7,600	6,700	8,000
Worcester.....	5,500	5,800	6,600	5,700	7,900	5,800	6,400	7,200	6,000	6,400	5,300	7,600	6,600
Youngstown ⁴	(⁵)	(⁵)	7,900	8,200	7,300	6,900	6,000	8,800	6,900	6,700	7,000	7,000	7,000

¹ Covers all privately financed new family dwelling units. Excludes trailers, dormitories, barracks, converted units, and all federally financed residential building.

² Industrial areas cover entire counties or groups of counties surrounding the central city or cities.

³ Based on contractors' estimates. Represents the cost of labor and materials, and all subcontracted work. Excludes land and development costs.

⁴ Includes permanent units financed by the New York City Housing Authority.

⁵ Youngstown area no longer being surveyed.

* Data not available.

Source: These data were compiled by the U. S. Bureau of Labor Statistics in connection with its housing statistics program. Data on private residential building started are based on reports from building-permit issuing offices and from building contractors and others in nonpermit issuing areas as well as in permit issuing places in the areas shown. Building permit data are corrected for lapsed permits and lag between issuance of permits and the start of construction, by follow-up of construction jobs for which permits have been issued.

TABLE F-8: Estimated Number and Construction Cost of New¹ Urban and Rural Nonfarm Dwelling Units Started, by Source of Funds

Year and month	Number of new dwelling units started									Estimated construction cost ² (in thousands)		
	All units			Privately financed			Publicly financed			Total	Privately financed	Publicly financed
	Total nonfarm areas	Urban areas	Rural nonfarm areas	Total nonfarm areas	Urban areas	Rural nonfarm areas	Total nonfarm areas	Urban areas	Rural nonfarm areas			
1925 ³	937,000	752,000	185,000	937,000	752,000	185,000	0	0	0	\$4,475,000	\$4,475,000	0
1933 ⁴	93,000	45,000	48,000	93,000	45,000	48,000	0	0	0	285,446	285,446	0
1941 ⁵	715,200	439,582	275,618	619,460	369,465	249,995	95,740	70,117	25,623	2,852,778	2,530,765	\$322,013
1944 ⁶	169,400	114,875	54,525	138,779	93,173	45,606	30,621	21,702	8,919	560,715	483,231	77,484
1946.....	776,200	493,963	282,237	662,526	395,642	266,884	113,674	98,321	15,353	4,103,251	3,713,776	389,475
1946: June.....	79,800	51,569	28,231	62,799	37,637	25,162	17,001	13,932	3,069	408,698	343,570	65,119
July.....	78,500	50,202	28,298	61,346	35,994	25,352	17,154	14,208	2,946	398,644	335,250	63,395
August.....	81,300	52,506	28,794	61,902	36,060	25,842	19,398	16,446	2,952	412,378	338,779	73,599
September.....	65,800	41,159	24,641	57,592	33,640	23,952	8,208	7,519	689	344,438	323,770	20,668
October.....	58,200	34,638	23,562	56,492	33,304	23,188	1,708	1,334	374	327,920	317,304	10,616
November.....	47,800	28,733	19,067	47,678	28,611	19,067	122	122	0	276,179	275,897	282
December.....	39,300	23,662	15,638	39,268	23,662	15,606	32	0	32	231,943	231,870	73
1947: January.....	40,100	24,611	15,489	38,998	23,527	15,471	1,102	1,084	18	235,105	227,682	7,423
February.....	44,100	25,774	18,326	44,100	25,774	18,326	0	0	0	244,755	244,755	0
March.....	59,000	33,674	25,326	58,425	33,183	25,242	575	491	84	328,720	326,456	2,264
April.....	69,500	38,858	30,642	68,724	38,530	30,194	776	328	448	393,234	388,155	5,079
May.....	72,700	39,376	33,324	72,544	39,376	33,168	156	0	156	418,008	416,875	1,133
June.....	79,200	43,005	36,195	77,027	42,000	35,027	2,173	1,005	1,168	461,997	446,600	15,397

¹ Covers both permanent and temporary new family dwelling units. Includes those family dwelling units in the Federal temporary re-use housing program provided by dismantling temporary war structures and their re-erection at new sites.

² Private construction costs are based on permit valuations, adjusted for understatement of costs shown on permit applications. Public construction

costs are based on contract values or estimated construction costs for individual projects.

³ Housing peak year.

⁴ Depression, low year.

⁵ Recovery peak year prior to wartime limitations.

⁶ Last full year under wartime control.